ANALOG

SCIENCE FICTION AND FACT

APRIL 2003

Walk in Silence
Catherine Asaro

JAN 04
MRS J COLLING BLNC
708 STATE ROUTE 193 S #0190
JEFFERSON OH 44047-8498
#CLL0708S093 5#611872 DD
#BXNDCNB ******* 3-DIGIT 440

Ben Bova

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Be in Style...
with Heavy Cotton T's from

Asimov's Science Fiction and Analog Science Fiction and Fact

Mail to: Dell Magazines Direct • 6 Prowitt St.
Suite Promo T • Norwalk, CT 06855-1220

Asimov's Science Fiction T-Shirt (AST)

SOLD OUT ____S SOLD OUT ____M ____L ____XL ____XXL $9.99 each $_____

Analog Science Fiction & Fact T-Shirt (ANT)

SOLD OUT ____S SOLD OUT ____M ____L ____XL SOLD OUT ____XXL $9.99 each $_____

Shipping & Handling _____ x $2 $_____
(Add $2 per T-shirt or $6 for three or more.
Deliverable to US addresses only) **Total:** $_____

❑ Enclosed is my payment. Please charge my: ❑ VISA ❑ MASTERCARD

CARD #_____ EXP. DATE: ___ / ___

CARDHOLDER'S SIGNATURE_____

NAME _____

ADDRESS _____

CITY _____ STATE_____ ZIP_____

Order online or mail the order form with your payment today.

NSTS62

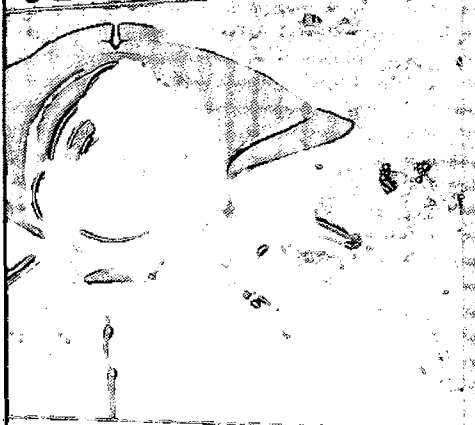
LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

NEW FROM ASPECT

"One of Hamilton's best... undeniably a page-turner."
—*Publishers Weekly* (starred review)

AUTHOR OF THE REALITY DYSFUNCTION

PETER F. HAMILTON



FALLEN DRAGON

"A rousing, space-operative read."
—*New York Review of Science Fiction*

"Absolute vintage science fiction....Hamilton puts [SF] back into interstellar overdrive."
—*The Times* (London)

"A fascinating, compulsively readable clash of hardware and ideals."
—*Kirkus Reviews* (starred review)

"Space operas are galaxy-spanning tales of battling starships and exploding planets.... Peter F. Hamilton has joined this breed in a big way."
—*Denver Post*

A young soldier tries to steal a legendary gemstone for himself, but instead encounters an ethical dilemma that affects the galaxy in this epic space adventure from the bestselling author of the Nights Dawn Trilogy and finalist for the Arthur C. Clarke Award, Peter F. Hamilton.

NOW IN PAPERBACK

ASPECT

WHERE IMAGINATION KNOWS NO BOUNDS

Visit our Web site at www.twbookmark.com

An AOL Time Warner Book Group Company

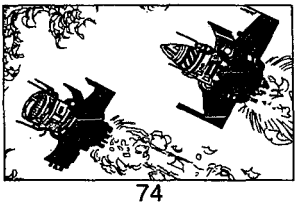
LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ANALOG

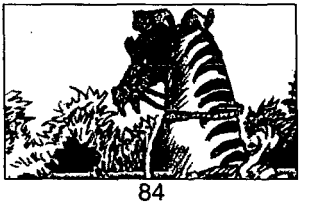
SCIENCE FICTION AND FACT

Vol. CXXIII No. 4
April 2003

Next Issue on Sale
April 1, 2003



74



84

SERIAL

SHOOTOUT AT THE NOKAI CORRAL (Part Three of Four), Rajnar Vajra ____ 84

NOVELLA

WALK IN SILENCE, Catherine Asaro ____ 8

SHORT STORIES

A DEADLY MEDLEY OF SMEDLEY, F. Gwynplaine MacIntyre ____ 47

EMMA, Kyle Kirkland ____ 64

COMING OF AGE, Mary Soon Lee ____ 74

SCIENCE FACT

ISAAC WAS RIGHT: N EQUALS ONE, Ben Bova ____ 40

READER'S DEPARTMENTS

THE EDITOR'S PAGE ____ 4

IN TIMES TO COME ____ 63

THE ALTERNATE VIEW, Jeffery D. Kooistra ____ 60

THE REFERENCE LIBRARY, Tom Easton ____ 132

BRASS TACKS ____ 138

UPCOMING EVENTS, Anthony Lewis ____ 144

Stanley Schmidt Editor — **Trevor Quachri** Associate Editor

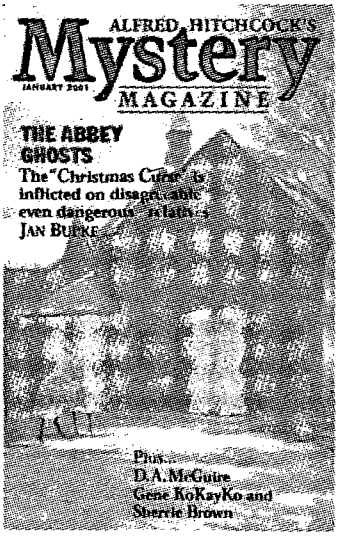
Cover Art by George Krauter

Indicia on page 5

Online Chat Listing on page 39

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

SOME PEOPLE WOULD KILL...FOR A COPY



But you don't need to! Subscribe to Alfred Hitchcock's Mystery Magazine and you won't miss a single issue of all the mystery and intrigue you love. Each year you'll enjoy 10 issues of 144 pages and one double issue of 240 pages delivered directly to your door.

Act now and take advantage of this special introductory offer,
6 issues for just $9.97!

Enjoy the convenience of home delivery and save!

To order by charge card, call toll-free:
1-800-333-3311
Outside the U.S.A.: 1-850-682-7644

BY MAIL

Alfred Hitchcock • P.O. Box 54011
Boulder, CO 80322-4011

Please allow 4 to 6 weeks for delivery of your first issue. Outside USA: Add $4 per year for shipping and handling. All orders must be paid in U.S. funds.
*We publish a double issue once a year which counts as two issues toward your subscription.

5P21

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

STILL GUESSING, AFTER ALL THESE YEARS

About a year ago (in our April 2002 issue), Dr. Robert Zubrin, in his article on "Galactic Society," offered some thoughtful reasons to believe that there are lots of advanced civilizations in our galaxy, even though we haven't yet seen any direct evidence of them. In this issue, Dr. Ben Bova, in his article "Isaac Was Right: N Equals One," offers some thoughtful reasons to believe that there aren't—that there may, in fact, not be *any* except us.

So which, if either, is right? Or at the very least, since *Analog* published both articles, what is the official *Analog* position on the question?

The short answer is that there is no official *Analog* position, on this or anything else. We do not claim to provide, or even to have, definitive answers. Our business consists far more of asking provocative questions, with the hope that they may eventually lead to good answers.

In this case, though, I am willing to offer my current personal answer: We're all still guessing. Either Zubrin or Bova could ultimately turn out to be right, or they could both turn out to be wrong. Both have plausible justifications for the values they consider likely for the various factors in the Drake equation. Neither of them knows what the values really are—and neither do I, and neither do you.

As somebody once observed, the only truly reliable way to determine the number describing any aspect of the universe is to measure it directly. (And even that isn't perfectly reliable; there's a whole branch of science devoted to estimating how much confidence can reasonably be placed in any particular measurement.) As somebody else once observed, you can't plot a graph from one data point.

And that's what we have so far, in the question of how common technologically advanced civilizations are. One data point: us. And that one point tells us nothing about how many, or how few, others there might be; or how (if they exist) they're distributed; or what they're like.

The reason people keep playing this game, of course, is the so-called Fermi paradox. Both Zubrin and Bova discuss it in their articles, so I need only the briefest reminder here. As long ago as 1950, it had begun to look likely that life would arise naturally on many planets throughout this galaxy and others. It seemed almost as obvious that once it did, it would be likely to evolve lots of forms, some of which would eventually have something like our intelligence and technology. If even one such civilization adopted a program of interstellar expansion, using speeds of a few percent of the speed of light—something well within the realm of physical possibility—it could fill our galaxy in one to a few million years.

On this much Zubrin and Bova agree. The galaxy is several *billion* years old. So, Enrico Fermi asked, where are they? Why haven't we seen any evidence of them?

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Many possible explanations have been offered. (A good survey of several of them can be found in David Brin's *Analog* articles "Xenology: The New Science of Asking 'Who's Out There?'" [May 1983] and "Just How Dangerous Is the Galaxy?" [July 1985].) I came up with one particularly nasty one myself in "The Fermi Plague" (*Analog*, October 1998; reprinted in *Which Way to the Future?* [Tor Books, 2001]). The essence of that one is that advancing technology increases the amount of power individuals or small groups can wield, and population growth leads to an increasing probability that some individual will eventually have enough power to destroy a civilization, and be crazy enough to do it. (I wish I could say it was just an intellectual exercise and I don't believe it.)

Zubrin offers explanations of his own, because he favors guesses that suggest starfaring civilizations are common. Bova takes a radically different tack, pointing to recent biological evidence that intelligence is nowhere near as inevitable a development as we've liked to believe. This is a far simpler explanation, he says, and therefore likely to be correct—an argument that has some qualitative merit, though Occam's Razor as commonly stated is more a philosophical rule of thumb than a rigorous scientific principle. In his deliberately provocative title and opening, he states flat out that we're literally alone. He later admits that even if his argument is basically sound, it may not be quite that simple, but he at least entertains "we-are-alone" as a serious possibility.

And it is. It seems to me that the Zubrin and Bova positions can be viewed as two ends of a spectrum of possibilities. Either could be true, but I see no reason to regard either as anything like proven, or even clearly more likely than the other. I say this in large part because I find it so easy to imagine intermediate possibilities that may be more likely than either—and because so many of the arguments used by proponents of both sorts of "extreme" position seem to me unlikely to apply in the real universe.

Consider, for example, the aforementioned claim, cited by both Zubrin and Bova, that a civilization setting out on a program of expansion could fill the galaxy in a million years or so. Zubrin actually uses the more conservative numbers here; he says, "If an advanced civilization were to adopt an expansion program and move out at 0.5 percent of the speed of light, it would take at most 20 million years to occupy the whole place." Skip over the fact that even that rate of expansion seems pretty ambitious; let's even use the higher rate that Bova cites, and grant that the galaxy could be filled by one civilization in a mere *one* million years.

When was the last time you saw a civilization stick to any program for a million years, or even a thousand? Our

Analog Science Fiction and Fact (Astounding), Vol. CXXIII, No. 4, April 2003. USPS 488-910, ISSN 1059-2113, GST# 123054108. Published monthly except for a combined July/August double issue by Dell Magazines, a division of Crosstown Publications. One-year subscription for $39.97 in the U.S.A. and possessions, in all other countries, $47.97 (GST included in Canada) payable in advance in U.S. funds. First copy of new subscription will be mailed within eight weeks of receipt of order. When reporting change of address allow 6 to 8 weeks and give new address as well as the old address as it appears on the last label. Periodical postage paid at Norwalk, CT and additional mailing offices. Canadian postage paid at Montreal, Quebec. Canada Post International Publications Mail, Product Sales Agreement No. 260622. © 2003 by Dell Magazines, a division of Crosstown Publications, all rights reserved. Protection secured under the Universal Copyright Convention. Reproduction or use of editorial or pictorial content in any manner without express permission is prohibited. All stories in this magazine are fiction. No actual persons are designated by name or character. Any similarity is coincidental. All submissions must be accompanied by stamped self-addressed envelope, the publisher assumes no responsibility for unsolicited manuscripts or artwork.

POSTMASTER: Send change of address to: ANALOG SCIENCE FICTION AND FACT
P.O. Box 54625, Boulder, CO 80328-4625.

IN CANADA RETURN TO: Transcontinental Sub Dept, 525 Louis Pasteur, Boucherville, Quebec, J48 8E7
Executive Office: Penny Press, 6 Prowitt St., Norwalk, CT 06855
Editorial and Advertising: Analog Science Fiction and Fact, 475 Park Avenue South, New York, N.Y. 10016
Subscriptions: Analog Science Fiction and Fact, P.O. Box 54027, Boulder, CO 80322-4027

Printed in Canada

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

species has only been around for roughly that long, and in that much history it's hard to find any program, policy, or way of life persisting for even a couple of centuries. So the idea that if a civilization becomes capable of such expansion, it will "soon" fill the galaxy, seems to me quite a stretch. It may happen; but if and when it does, it will represent an exceptional accomplishment.

If such civilizations arise as often as some suspect, the probability may be reasonably high that at least one of them will carry out such a far-flung expansion. If they're as rare as Bova suspects, the probability seems much lower. It could happen; a civilization alone would seem to have neither fundamental physical obstacles nor competition from others of its kind standing in its way. But its interests may simply not run that way. I can't think of any reason why everybody has to have such an extreme, permanent territorial drive, and I can think of a lot of other ways a civilization might choose (or be forced) to develop. The Frank Tipler scenario Bova describes is one, leading to a sort of expansion not by the builders of a civilization themselves but by self-reproducing machines that, once launched, can in principle continue indefinitely even if their makers perish or lose interest. That, too, is possible, but far from inevitable.

And the real number of advanced civilizations, or even intelligent species, may lie somewhere between the extreme guesses. Bova and the biologists he cites may be right that intelligence is only one of many survival tools, arising relatively seldom, and the number of civilizations may be much smaller than people like Zubrin and Sagan have suggested. But that might easily mean, for example, that instead of one civilization or ten thousand, our galaxy will host a dozen. A number like that would have at least two important consequences for this argument.

First, it greatly reduces the likelihood of any of the many possible kinds of history actually happening in one or more of those few. Among those dozen there might be, for example, three that simply never developed the capability for interstellar travel or communication, two that destroyed themselves before they could, three who found the cost-benefit ratio so unfavorable that they never made the quite large investment and effort that would be required to carry it out, and four that started expanding but

STANLEY SCHMIDT .....Editor
SHEILA WILLIAMS .....Executive Editor
TREVOR QUACHRI.....Associate Editor
BRIAN BIENIOWSKI.....Assistant Editor
STEPHANIE RATCLIFFE .....Editorial Assistant
MARY GRANT .....Editorial Assistant
VICTORIA GREEN .....Senior Art Director
JUNE LEVINE.....Associate Art Director
CAROLE DIXON.....Senior Production Manager
ABIGAIL BROWNING.....Manager, Subsidiary Rights and Marketing
SCOTT LAIS.....Contracts and Permissions
JULIA McEVOY .....Manager, Advertising Sales
CONNIE GOON .....Advertising Sales Coordinator
BRUCE W. SHERBOW.....VP, Sales and Marketing
SANDY MARLOWE .....Circulation Services

PETER KANTER
Publisher

CHRISTINE BEGLEY
Associate Publisher

SUSAN KENDRIOSKI
Executive Director,
Art & Production

Published since 1930

First issue of Astounding
January 1930 ©

ADVERTISING REPRESENTATIVE David Geller Publishers' Rep. (212) 455-0100
EDITORIAL CORRESPONDENCE ONLY analog@dellmagazines.com

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

got tired of it or became more interested in other things and gave it up. In such a case, you have twelve civilizations, each following a quite plausible line of development, and none of them ever expanding much beyond its point of origin. The result is a galaxy emphatically not devoid of advanced civilizations, but looking that way unless you happen to look in the very few right spots.

Which leads us to the second important consequence of having a small but significantly nonzero number of civilizations: On average, they're quite far apart—say, ten or twenty thousand light-years—and there's no reason to expect any of the others to be anywhere near ours. Fermi and Bova and several thoughtful readers may speak of "the deafening silence from the stars," but what they really mean is a lack of clear evidence from the small group of stars where we've looked so far. That group is a *very* small part of the total—tens of light-years out of 100,000—and we haven't looked at it very long or very thoroughly. To put things in perspective, think of the galaxy as a large pizza, half a meter in diameter. Concluding from our lack of positive findings so far that there's no other civilization in our galaxy is much like concluding that there's no pepperoni on the pizza because you've only looked inside a tiny flake of oregano.

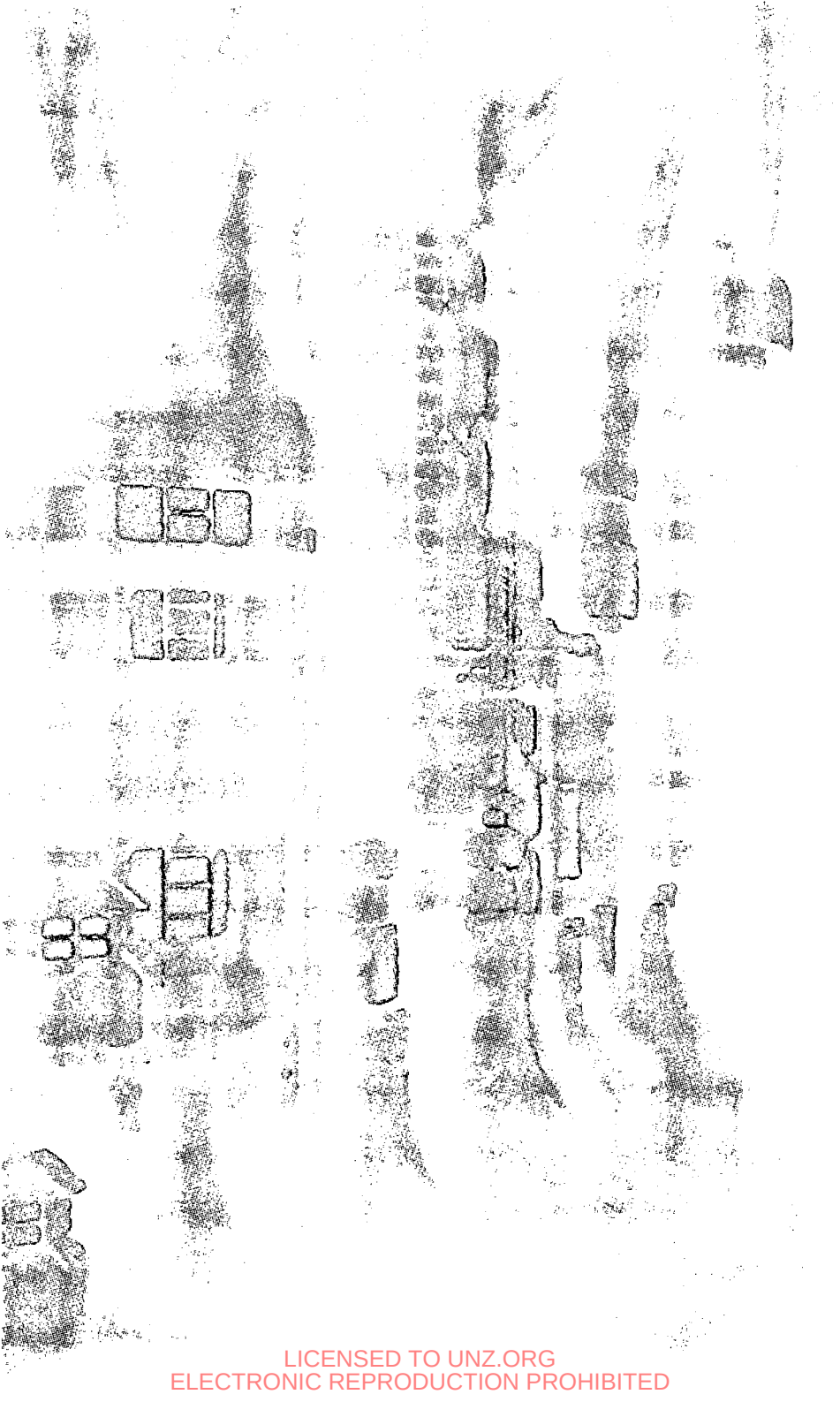
Furthermore, the observation that intelligence has taken half the lifetime of our Solar System to arise here does not prove it's improbable or rare. If it hadn't arisen yet, it would still have that other half of the available time to do so, which represents quite a lot of opportunity.

So I, like Freeman Dyson, remain at least skeptical of all attempts to estimate the frequency of occurrence of intelligent life or advanced civilization. I recognize a wide range of scenarios as real possibilities, and I suspect that the truth lies somewhere between the more extreme guesses. But of course, I'm guessing, too.

Read Ben Bova's article in this issue, and think carefully about it. Reread Robert Zubrin's earlier article and think carefully about that, too. They both have eminently worthwhile points to ponder. But they're both still guessing, even though theirs are quite educated guesses, and none of us will *know* until such time as we have far more direct evidence than we're in a position to have so far. I hope we'll continue the effort to get that knowledge; but in the meantime, science fiction writers still have an extremely wide range of real possibilities to explore. ■

We welcome your letters, which should be sent to Analog, 475 Park Avenue South, New York, NY 10016, or e-mail to **analog@dellmagazines.com**. Space and time make it impossible to print or answer all letters, but please include your mailing address even if you use e-mail. If you don't want your address printed, put it only in the heading of your letter; if you do want it printed, please put your address under your signature. We reserve the right to shorten and copy-edit letters. The e-mail address is for editorial correspondence *only*—please direct all subscription inquiries to:
P. O. Box 54027, Boulder, CO 80322-4033.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Walk in Silence

Catherine Asaro

Illustration by George Krauter

If ancient animosities are finally laid to rest, will new ones take their place?

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

I
Silver Tide

Lieutenant Colonel Jess Fernández was sick. She sat in her chair at the end of a giant robot arm that could swing anywhere within the large hemisphere around her. Although she could act as captain from many locations within the ship, she spent most shifts here on the bridge.

She rubbed her eyes, exhausted after having worked late the previous evening, ship's time. Her queasy stomach didn't help. She also had a cold, of all the absurd anachronisms, and she felt like hell.

Holoscreens covered the surface of the kilometer-wide dome that formed the bridge. Right now they showed the planet Athena, a gas giant banded by blue and red clouds, glowing against the spangled backdrop of space. The view to starboard lifted her spirits. It came from a satellite orbiting Athena and showed her ship, *Silver Tide,* a scientific research facility. The vessel glistened, a rotating cylinder several kilometers long. Lights sparkled along its body, on antennae, pods, struts, and towers.

Jess always got a kick out of watching *Silver Tide* from within the ship. She had never lost the awe she felt that first time she boarded, coming to assume her command. In the five years since, *Silver Tide* had become part of her.

Her stomach interrupted her enjoyment with an unwelcome lurch. Trying to divert her thoughts, she magnified the screen images. Now they revealed a small spacecraft on approach, a Bolt transport. On *Silver Tide,* the pod on a docking tube was opening like a giant flower. The Bolt sailed inside and the pod closed, swallowing the craft. Jess recognized the Bolt; it carried Jack O'Brien and his Allied Services team, which tracked the interstellar black market. They were hitching a ride on *Silver Tide,* headed out across space to bust smugglers.

Jess sniffled, distracted by her stuffy nose. Pah. This was absurd. She had all her inoculations. Granted, none were 100 percent effective, but humans had cured most strains of the common cold. It irked her no end to have caught one anyway.

She still had to do her job. To the computer, she said, "Spin her up."

"Done," it answered. The bridge began to turn, its screens adjusting to keep the view stationary. She rotated the bridge during part of each shift so her crew at the consoles on the hull weren't always in micro-gravity. Against the immensity of space, their stations were tiny wedges moving past the stars. Usually Jess reveled in that glorious vista. Unfortunately, seeing those consoles zip by today did nothing glorious for her stomach. Bloody hell. Captains weren't supposed to get sick.

Jess sent her chair humming toward a hatch on the hull. To match speed and position with the moving hatch, the chair turned upside down, making her dismayed stomach flip-flop. She gulped bile as she shoved out of her seat. Then she rendezvoused with the Bridge Renewal and Refresher Chamber, otherwise known as the loo.

As she squeezed into the cubicle, a med-holo of her face formed in front of the opposite panel showing a woman with black hair tousled around her shoulders. Dark smudges showed below her eyes.

She barely had time to lean over the sink before she lost her lunch.

"You work too hard." Dr. George Mai stood by the bed in the exam room, scanning his holopad. A heavy-set man of average height, he had a kind face and brown eyes. He frowned at Jess, who was sitting on the end of the bed, her booted legs almost touching the floor. "You should come in more often for a check-up," he admonished.

Jess barely held back her grimace. She had never liked hospitals. "I'm not working any harder than usual. I've no reason

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to be sick."

"I'm still checking a few tests, but I can already give you the diagnosis." He turned off his holopad. "You have a cold, Captain. You need rest. Relaxation."

Jess glowered at him. "I'm perfectly relaxed."

He started to answer, then seemed to think better of it. Instead he said, "I'll let you know if anything else turns up."

"Thank you." She slid off the bed, standing half a head taller than him.

"You really could use a rest," he said. "Doctor Bolton would say the same."

Gads. He was pulling out the big guns. She could just hear Sandra Bolton, the senior physician at Claymore Hospital: *I insist you relax, Jess. Take a vacation, find a hobby, meet some people. You're an intelligent, accomplished, attractive woman. All right, so you're also stubborn as all hell. But you still need a social life.*

Stubborn, pah. Sandra didn't seem to understand the words, *I'm fine, go away.* Jess had great respect for the doctor's abilities, but she had no wish to hear Sandra's unsolicited advice on her personal life, or lack thereof.

Especially not now.

Jess hurried through the secluded woods around the medical park. She had changed back into her uniform, the blue trousers and shirt of a lieutenant colonel in the Space Corps of the Allied Worlds of Earth. At six-foot-two, with long legs, she devoured distance as she strode along a gravel path. The trees and flowering bushes on both sides tended to make her forget she lived on a star ship. Then she reached an open area and saw the forest sloping up the distant curve of the cylinder. The "sky" consisted of light panels in the overhead deck.

Silver Tide was a self-sufficient habitat, with its own towns and countryside. It carried thousands of people, primarily civilians, though Jess and her officers served in the Space Corps. The scientists onboard did research related to space, studying everything from genetically altered colonists on other planets to star formation. Researchers throughout the Allied Worlds of Earth regularly applied for grants to work on *Silver Tide.*

Jess sighed. Cold or no cold, she had work to do. She headed for the administrative park where her staff had their offices. The gleaming buildings were scattered among lawns and parks, with abstract sculptures that had never made a whit of sense to Jess. The modern art looked ugly to her, but perhaps she was too pragmatic to appreciate its nuances.

For the rest of the day, she met with the heads of science divisions, working on the ship's itinerary. They had just picked up several astrophysicists who would study interstellar dust clouds for the next few months. Several weeks ago *Silver Tide* had dropped off a team of anthropologists on the world Icelos, and Jess wanted to check on them. Other groups had other itinerary requests.

Normally Jess enjoyed this part of her job, but today she felt too queasy to do more than function. During a meeting with the Microbiology division, she started to sneeze. She wished the medpatch George had given her would take effect. This was embarrassing.

After a full day, she headed home for a few hours of sleep. As she walked, she brooded on the discord among her staff. Several argued against returning to Icelos to check on the anthropologists. They claimed it would take valuable time other research teams needed. Jess found that hard to credit, given how often *Silver Tide* made such checks. Far more likely, their reluctance came about because Icelos was a Cephean world.

Cepheans had once been human. Six thousand years ago, an unknown race had moved humans from Earth to another planet, then vanished with no explanation. The stranded humans learned genetic engineering in desperation; without it, their population would have

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

been too small to maintain a viable gene pool. Driven by memories of their lost home, they also developed space travel and went in search of Earth. So it was that five millennia ago, Earth's displaced children built an interstellar empire.

But the empire soon collapsed, stranding its colonies. Although its descendants took thousands of years to regain space travel, they eventually succeeded, this time building a formidable civilization, the Skolian Imperialate. When Earth's people finally reached the stars, they found their lost siblings already there, busily building empires. The Skolians had recovered many of their ancient colonies—including Cepheus.

The name was actually an Earth word. Unable to reproduce Cephean speech, Earth's humans called the world Cepheus after a mythological king descended from Zeus, because the parent star appeared in the direction of the constellation Cepheus when seen from Earth.

However, Cepheus was a Skolian world. Its colonists had altered themselves, though now, millennia later, no one knew why. If they had intended to expand their gene pool, they failed miserably; Cepheans could neither reproduce with humans nor had any interest in doing so. Perhaps the changes adapted their harsh new world. They had two extra arms, modifications to accommodate the limbs, and luxuriant pelts. Entrepreneurs on Earth had spent millions trying to synthesize the fur, but that was all most humans liked about their altered neighbors. Cepheans evoked ancient terrors: Yeti, golems, stalkers in the night, a child's nightmare.

Initially Cepheans had liked humans, responding on an instinctual level. Earth's children looked like pretty pets to them. They turned wary as they discovered their long-lost siblings were anything but simple or malleable. When they realized how much humans reviled them, their unease became hostility.

A few decades ago, the Cepheans had settled Icelos, a planet in a system near their home. The colony's scientific nature made it amenable to interaction with humans, and scientists on Earth and Icelos soon set up an exchange program. *Silver Tide* had carried Earth's research team to Icelos, and Jess felt responsible for them. The exchange offered a symbol, proof that humans and Cepheans could work together. But the tenuous accord could unravel all too easily.

Dusk spread over the landscape as the panels dimmed overhead. Weary, Jess sat on a large boulder by the path and folded her arms across her torso. She leaned forward, swallowing the bile in her throat; either George's medicine wasn't working or else she needed new thoughts. She felt like hell.

Better not to think of Icelos.

With her arms crossed on her polished desk, Jess nodded pleasantly to the man sprawled in a leather armchair of her office. "I hope your accommodations are acceptable, Mr. O'Brien."

Jack O'Brien gave her a rakish grin, more like a pirate than a security officer in the Allied Services. "Top shape, Cap'n." A black curl fell over his forehead as he took a swig of his coffee. "After our military transport didn't show up, we figured we were stranded at Epsilani Station. Your ship was a godsend.

"I'm glad we could help." Although the Space Corps had no formal connection to the Allied Services, Jess had no objection to their agents hitching a ride on her ship.

The comm in her desk buzzed. Touching a panel, she said, "Fernández here."

Sandra Bolton's voice crackled. "Captain, I need to see you as soon as possible."

Jess held back her groan. She had no wish to see Sandra now or ever, but she knew the doctor; the more Jess balked, the more Sandra would persist. The last thing she needed right now was to have

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

a verbal duel with the head of Claymore Hospital in front of a visitor.

Jack O'Brien stood up, setting his mug on her desk, and mouthed, *Thanks for the coffee.* Relieved by his tact, Jess raised her hand to him as he left. When she was alone, she spoke into the comm. "I'll stop by the hospital later if I have time." She had a lot of work to finish today. In fact, she had just remembered more she had to do. Incredible amounts.

Sandra wasn't buying it. "This can't wait."

Jess frowned. "Why not?"

"You should come here."

That gave Jess pause. Sandra wasn't usually this oblique. It might bear checking out. Grudgingly, she said, "All right."

Sandra stood at a bench surrounded by monitors. The doctor was five-foot-six and had gained weight over the years, nothing drastic, but enough to make her round. Her short, stylish hair gleamed silver in the harsh light.

As Jess entered the exam room, Sandra turned and regarded her with a neutral expression. Bland. Sandra never looked bland. Something was up.

Jess stopped just inside the room, even more wary now. "Yes?"

Sandra studied her face. "We need to talk."

"How about some other time?" Like in a century.

"Jess, listen." The doctor cleared her throat. "It's about the suggestions I gave you."

"Which ones? You give a lot." Sandra's inventory of lectures was formidable.

"About socializing."

Jess would have laughed if she hadn't been so astounded. "Is that why you called me here so urgently? To find out if I've gone to any parties?"

"No. I just hadn't expected you to actually take my advice." Sandra laid her hand on the exam table, as if for support. Then she took a deep breath. "Jess—you're pregnant."

Jess stared at her, at a loss for a reply. It was simply too ludicrous. Finally she found her voice. "Is this some sort of tasteless joke?"

Sandra showed no sign of laughing. "George and I did three independent checks. They all give the same result."

Jess scowled. "Then your procedures have some problem."

"When George saw the result during your exam earlier, he thought it was a mistake too. But we checked. It's true."

"Sandra, for crying out loud. I *can't* be pregnant."

The doctor spoke dryly. "You aren't the first woman to say those words. Nor the first to be wrong."

"I'm not saying it's unlikely. It's impossible."

"No birth control method is one hundred percent effective."

Jess wished she were somewhere else. Anywhere. Discussing her sex life, or lack thereof, was about as high on her list of preferred activities as having a tooth pulled without benefit of modern dentistry. She crossed her arms. "It requires a merger to effect the result you attribute to the sole capacity of my reproductive organs."

The doctor smiled. "Does that have a translation into something I can understand?"

So much for subtlety. Jess felt herself redden. "It means I haven't, uh—been with a man."

Her tormentor shrugged. "Maybe you forgot."

"*Forgot?*" Jess couldn't believe she was having this conversation. "That's ridiculous. And no, I didn't go to a sperm bank."

"So how did you get pregnant?"

"I *didn't.*"

Sandra continued as if Jess hadn't spoken. "You caught a cold because your resistance is down. You need more rest now and you're not getting it. And it's why you've felt nauseated. You have morning sickness."

"I have it all day," Jess grumbled.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"You must have missed two cycles by now. Didn't you notice?"

"I'm always irregular when I'm off-planet."

Sandra scrutinized her. "Could you have had sex without knowing it?"

This felt more surreal by the moment. "I think I would have noticed."

Sandra motioned at the bed. "Lie down."

Jess scowled at her.

The doctor smiled. "I don't bite, you know."

"You do worse," Jess muttered. "You give advice." But she went to the bed and lay on her back. Her feet hung over the bottom edge.

Sandra clicked up an extension to support Jess's feet. Then she moved to a monitor and said, "Scan one, Jazmín Fernández." It was one of Sandra's few redeeming qualities: she knew how to say her captain's name. It wasn't that Jess didn't like her nickname; she had answered to Jess since her childhood in London. But she still appreciated it when someone pronounced Jazmín right.

"Type R scan," Sandra said. She unhooked a cable from the monitor, rolled up Jess's shirt, and proceeded to slide the disk across her abdomen.

"Hey." Jess stiffened. "What are you doing?"

"Relax. It's just an image processor." Sandra motioned at the monitor. "Look."

Jess peered at the screen. A color image was forming, set against a dark background. It showed a sac holding a tiny figure with a huge head and a flutter inside its body. "What is that?"

"Your baby," Sandra said. "The motion is its heartbeat."

Jess blinked. Could she truly have conceived a child? *How?*

Sandra studied a panel below the monitor. "This verifies the tests. You're nine weeks pregnant."

"Nine weeks?" Jess sat up suddenly. "That's when we took those anthropologists to Icelos."

Dryly Sandra said, "Your memory coming back?"

Jess flushed. "I still can't be pregnant."

The doctor gentled her voice. "In a situation like this, denial isn't unusual. But you need to accept it, Jess. You need to decide what you intend to do."

Jess stared at the monitor, watching her baby's heart beat. A new life. Incredible. Protective instincts surged in her, similar to what she felt for *Silver Tide.*

She glanced at Sandra. "If you're asking do I want to give up the child or end the pregnancy, the answer is no."

Sandra didn't look surprised. "Shall I contact the anthropologists?"

Jess's voice came out sharper than she intended. "My child's father is *not* on Icelos." She slid off the bed and paced away from the doctor. "I don't know how this happened."

Sandra made a frustrated noise. "Fine. I give up. You had no lover. You conceived out of nothing."

Jess turned around. "I didn't say I had no lover."

"Ah." Sandra came over to her. "Now we're getting somewhere."

"He can't be the father."

"You have other candidates?"

"No." Jess fixed Sandra with what she hoped was a quelling stare. "But he can't be the father."

Sandra didn't look the least bit quelled. "You know mistakes can happen."

"Not in this case."

"What kind of birth control did you use?"

"I didn't."

Sandra snorted. "And you're surprised you're pregnant?"

"I didn't need any."

"Why? Is he sterile?"

"No. I just didn't need it."

"I don't believe you could be that naïve."

Jess glared at her. "Damn it, Sandra, let it go."

"Let *what* go?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"All right!" Jess crossed her arms again. "My companion was Ghar Ko. Satisfied?"

Sandra stared at her. "You mean the Cephean Ambassador?"

Jess wished she could disappear. "Yes."

Sandra finally closed her mouth. "Lord Almighty."

"What I just told you is confidential."

"Yes, yes, of course." Sandra looked as if she couldn't decide whether to be fascinated or appalled. "And yes, you're right. Human beings cannot have babies with Cepheans."

"Are you sure the child is human?" Maybe the scientists were wrong. Maybe hybrid offspring could exist.

"Completely human." Sandra rubbed her chin. "A Cephean male couldn't impregnate you. Too many differences exist in the DNA."

"I don't know what to say." Jess had yet to sort out how she felt about what had happened. She certainly didn't want to discuss it with Sandra. But she had to file a report, even if she declined to name the nonexistent father. Although maternity no longer meant an end to active duty on a ship like *Silver Tide,* a pregnant captain was hardly routine, especially an unmarried one. If she didn't handle this right, she could lose her command.

Sandra seemed curious now, instead of flabbergasted. "How does Ambassador Ko feel about it?"

"I don't know," Jess admitted. "It just—happened. Then we fell asleep. I woke up, wrote him a note, and left." *Silver Tide* had been scheduled to depart and she couldn't hold up the ship for her personal life. Or so she told herself. But she and Ghar could have sent messages later, via starship. That neither of them had done so suggested she wasn't the only one at a loss for words.

Sandra frowned. "I've never known you to be a coward."

"I'm not. I needed time to think." Ghar probably had too. She had no idea if their liaison appalled, embarrassed, or shamed him. "If his people learn about this, it will cause him problems. Cepheans don't much care for humans." To put it mildly.

"Apparently one of them does," Sandra said dryly. "This could blow up on you big time. Humans are just as xenophobic towards Cepheans."

"That's why I haven't said anything."

"What are you going to do?"

Good question. Too bad she had no answer. "What should I do for the baby?"

Although Sandra obviously wanted to continue the topic of Ghar, she held back, at least for now. Instead, she switched into her most professional tone. "No alcohol or caffeine. Sleep more. Avoid zero-g; otherwise the cells in the fetus might not orient correctly. On the bridge, minimize how long you spend weightless. No EVAs. Even inside the ship, make sure you always have radiation protection. If the nausea gets so bad you can't eat, let me know."

"All right." That all sounded manageable.

Sandra spoke more softly. "And Jess."

"Yes?"

"What happened would be difficult for anyone to handle. Especially if you had no choice. . . ."

It took Jess a moment to decipher her meaning. Startled, she said, "It was consensual." She couldn't imagine Ghar forcing her. With relations between Earth and Cepheus already so strained, it would have been madness. It would shatter the brittle concord between their peoples.

"Could it have happened while you slept?" Sandra asked. "By someone else?"

Jess blinked. "Of course not."

"Are you sure?"

Jess glanced at the monitor. It gave the time of conception as the night she had spent with Ghar. But she couldn't believe Ghar would be involved in such a strange deception. She turned back to

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Sandra. "I'm sure."

"It is hard to imagine," Sandra admitted. "If you remember anything, let me know." In a gentler voice she added, "And if you need to talk, I'm here."

"Thank you." Jess heard the stiffness in her voice. "But I'm fine. Really."

She wished she believed that.

Jess walked through the woods in a deepening twilight. She kept thinking about Sandra's question: could this have happened while she slept that night? But how? Someone would have had to enter Ghar's home and impregnate her while he was there. Regardless of whether they used artificial means or sexual, they would have had to drug her or find some other way to ensure she didn't wake up. She didn't see how they could have silenced Ghar, and she couldn't believe he would allow such violations. To what purpose? It was just too bizarre.

If Ghar had left for a while after she went to sleep, someone might have broken in during his absence. But that didn't make much sense either. If someone in the village had wanted sex, easier ways existed to find it than sneaking up to the Cephean ambassador's home and ravishing his guest in her sleep. Even if the person had sought the thrill of danger, Jess didn't see how he could have infiltrated the well-guarded Cephean colony or Ghar's home. And she knew Ghar too well to believe he would have left her alone long enough for such an outlandish event to occur.

She had last seen Ghar on Icelos, during a reception to welcome the anthropologists from Earth. Jess had never been comfortable at such gatherings. It had been a relief to leave with Ghar, the two of them deep in conversation. She wasn't sure how they had ended up at his home. They had settled on a soft rug and proceeded to get drunk on that sharp brandy the Icelos colony produced for export.

Eventually Jess had slumped against his huge frame, no longer able to sit straight, and he had pulled her against his chest with his lower arms. He had been using all four hands to talk by then. Cepheans couldn't replicate human speech, and humans couldn't mimic their language, so the two of them had conversed by signing. For some reason, they had decided to "talk" by pressing signs against each other's torso. Or maybe that had just been an excuse for their curiosity. It had soon grown more intimate.

Jess touched the comm on her gauntlet. Then she leaned against a tree, feeling the roughness of the bark through her shirt, and gazed into the dusk. The stillness of the night in the secluded forest helped calm her turmoil.

Her comm chimed. Touching the receive panel, she said, "Fernández."

"Captain, this is Sandra Bolton. I received your page."

Jess rested her head against the tree. "I was wondering how extensive a database you have for DNA records."

"It's a big one." Sandra didn't sound surprised by the inquiry. "Every time we link into a major medical system, we update ours. We probably have over eighty percent of the database for citizens of the Allied Worlds of Earth."

Jess spoke softly. "So if an Allied citizen has ever had a medical record made of his DNA, you've a good chance of having it."

"That's right." Sandra paused. "We only have a few records from Skolian databases. Our Icelos files are pretty skimpy."

"Check what you can." Jess swallowed. "See if you can match my child's DNA."

"I'll go through everything we have."

"Thank you." Jess paused, unsure what to add. "Good night."

"Good night." In a kindly voice, Sandra added, "Jess, go home and rest. Don't brood."

"Thank you. But I'm fine. Really."

After they signed off, Jess stood

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

watching the night. She couldn't handle this compassionate side of Sandra; it was easier to be annoyed when the doctor was giving a lecture. Confronted by a gentle Sandra, Jess feared she might drop her emotional guards. It would be tantamount to admitting she wasn't self-sufficient. She had spent a lifetime proving herself; she couldn't bear to ask for help now.

No matter how ill at ease she felt, she had to see Ghar. He might know what had happened. It wasn't something she could tackle long-distance; she needed to see him in person. And going to Icelos would make it easier to check their medical databases. But it would take a fortnight to reach the colony, using most of the leeway in *Silver Tide*'s schedule.

If she wanted to see Ghar, she couldn't hesitate.

II
Stalactite City

Icelos. Jess felt welcomed by the small world. After she left the starport, she headed into town. She could have taken a magrail or hitched a ride on a cargo lorry, but she preferred to go on foot. Warm within her climate-controlled jacket, she enjoyed walking in the three-quarters gravity.

The Cepheans were biosculpting the planet, adapting it for settlement. Although Icelos now supported humanoid life, the environment wasn't yet comfortable. Even here at the equator, the warmest zone of the planet, the temperature usually hovered around freezing. The village resembled a ski town, with alpine bungalows capped by peaked roofs. Putting her hands in her pockets, she crunched through the snow, avoiding icy patches on the cobbled lanes.

The village had a crystalline, glittering beauty. Jess took a deep breath, savoring the crisp air. Although she had chafed when Sandra prescribed shore leave, she was secretly glad the doctor insisted. During the last fortnight, as *Silver Tide* had traveled here, Jess had debated whether or not to send Ghar a message. Her doubts had stopped her. If he *had* somehow caused her strange condition, she didn't want to warn him that she was coming, lest he find a reason to cut short his visit to Icelos and return to Earth, where he served as ambassador. So she had held off.

She had spent the afternoon taking care of her duties; now she had two days to herself. Of course two days didn't amount to much on Icelos, which rotated in only eleven hours. Regardless, she would make her best effort to see Ghar. Her emotions tumbled over one another, conflicted and awkward, but she still looked forward to the visit. As difficult as it was to admit, she missed Ghar.

When Jess came around a house, her stride faltered and she stared along the street to the land beyond the town. Cliffs sheered into a cobalt blue sky, and above them, jagged mountains rose in cold, primeval splendor. The sunset edged their crowns like tubes of hot-pink neon. Here in the village, the snow drifted against the bungalows had turned a luminous pink. Ice hung in frozen lace from the houses, glittering like rubies.

With an appreciative sigh, she set off again. Exhaling, she watched her breath condense in the air. As she passed a bungalow, a spray of ice fell from its roof. Icelos had slumbered for eons; now the Cepheans were awakening the world. It seemed fitting; in Greek mythology, Icelos had been the son of Somnus, the god of sleep. But she suspected Earth's name for this world came from deeper in the human subconscious. The mythical Icelos had been a shape-changer who could turn into different animals; she often wondered if the name was an oblique, even unconscious acknowledgement by humans that their Cephean cousins had once been human and now were Other.

After a while, her gait slowed. She began to wish she had taken a hovercar.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

How had the human race survived so long, when incubating little humans took so much energy? She trudged on, trying not to think how far it was to home. A few years ago, the Allied embassy had arranged an apartment here for her, after the Cepheans requested her diplomatic services. The Cephean science commission and its Earth counterpart needed a liaison, someone who regularly traveled between Earth and Icelos, and the Cepheans already knew Jess from the visits *Silver Tide* had made.

She smiled wryly, remembering the dubious response from the Earth commission. As much as her taciturn bluntness appealed to the Cepheans, it annoyed humans. However, Allied Space Command liked that she got things done with efficiency and no fuss, so in the end she had become the liaison.

As sunset faded into a silvered dusk, Jess plodded to the intersection at Starfarer's Lane. The sign at the crossroads looked the same as always, a stone rectangle hanging from a pole. She had never paid it much attention before, but today its carved words jumped out at her.

Childcare. The arrow pointed right.

She knew she should continue on home, rest, eat, sleep. But instead she found herself turning right.

A simple bungalow housed the childcare center. When Jess opened the door, young voices burbled over her. She found a cheerful room inside, with white walls adorned by cartoons in bright red, blue, and yellow. Toys were strewn across the carpeted floor. Three toddlers played there, watched by a blond woman with a kind face. The woman glanced at Jess, then did a double-take, her gaze widening.

Jess hesitated. Self-conscious, acutely aware of her uniform jacket and trousers, she closed the door.

The woman recovered her composure and approached with a friendly smile. "Hello, Captain. What can I do for you?"

Good question. To cover her uncertainty, Jess said, "We're expanding a childcare facility on my ship. I'm interested in how other sites organize their centers." It was true, actually. A community on *Silver Tide* had requested a new center, and Jess had been meaning to have someone attend the matter. It occurred to her that she ought to do the attending herself; she might soon be using that center.

"I would be happy to give you a tour." The woman glanced at the insignia on Jess's jacket. With diffidence, she added, "On a ship as big as yours, though, I'm sure you have much more extensive facilities."

Jess felt more out of her depth here than she ever had on *Silver Tide.* She managed a smile. "Size and quality aren't the same. I've heard yours is a well-run operation."

The woman beamed. "That it is, ma'am." She motioned with her hand, inviting Jess forward.

So Jess went on a tour of the center. In one room, a girl and boy were stacking holographic blocks. Seeing them, she felt an odd constriction in her chest. Would her baby have dark curls like the boy? Or perhaps she would be like the girl, her eyes huge and dark, her sweet face shaped like a heart. But how could she imagine her child's appearance when the only paternal candidate was impossible? So far Sandra had found no genetic match for the baby, but the DNA was undeniably human.

Jess thought of her parents, their youth and energy drained from raising five children when they had resources for no more than one. The unrelenting demands of borderline urban poverty had ground the joy out of their lives. It had always made Jess uneasy about starting a family. Now an undefined longing tugged at her, feelings she had no name for, except that they came with a flavor of loneliness.

"Captain?" the woman asked.

Startled, Jess realized she had been

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

standing there, gazing at the children. She spoke softly. "They seem so happy."

The woman's voice gentled. "We do our best."

When the tour finished, Jess and the woman returned to the main room. About that time, a young couple came into the center, stamping snow from their boots, laughing together as they hung their jackets on a peg by the door. One of the toddlers ran to them, a strapping boy in a blue jumpsuit. The woman swung him into her arms, grinning when the boy laughed. As she sat in a rocking chair, the man settled in an armchair next to her, and they chatted companionably while the woman nursed the child.

After Jess left the center, images of the family stayed in her mind. She wanted to share this pregnancy with someone. Ghar. But she feared to tell him. She hated to think he might have betrayed her trust. If he *hadn't* caused this to happen, he would make the only logical assumption, that she had taken a human lover that same night. Although she had no way to know how much he would care, if at all, she didn't want him to believe she would betray his trust either.

Hell, what could she say when she had no idea herself what had happened?

The penthouse took up the top floor of The Conners, one of the tallest structures in the village, an elegant tower seven stories high. As Jess entered her darkened apartment, the curtains across the room parted, probably responding to a command from Matrix, the Evolving Intelligence that ran the place. He often altered the ambience, which meant she came home to unexpected changes. She tended to enjoy it; over the years, he had developed a sense of her preferences.

The curtains opened on a window that took up most of the wall. Night had fallen outside, and light from the star-encrusted sky poured through the window, making the white carpet glow. Standing in the center of her sunken living room, Jess gazed out at the night's beauty. Usually she savored the spacious dimensions of the place, which fit her height, but tonight it just made her more aware of its emptiness.

"Matrix," she murmured. "It's too dark."

The lights came up slowly, letting her eyes adjust. The room had simple furniture, elegant and sleek, with silver accents and plants in blue-glass pots. Relieved to be home, Jess dropped onto the sofa and pulled off her boots. She stretched her legs across the blue-glass coffee table, her feet reaching the other side. *Legs that go on forever.* A man she had known ten years ago had told her that.

Her husband.

He had come to London from Norway. They had spent five years together, with a renewable marriage contract. Then she became captain of *Silver Tide.* He didn't want to leave Earth and she didn't want to give up her command, so they had let their contract lapse. Although they had parted amicably, the loss had affected Jess deeply, far more than she wanted to admit. Since then, she had guarded her emotions even more.

Until Ghar.

Perhaps it had been the brandy, or the unreality of that night. Or maybe she just liked him better than anyone else she had met, despite his being Cephean. She shook her head at her folly. *You never do things the easy way, do you?* Exhausted, she slumped back and closed her eyes. She knew she should have dinner, but the thought made her stomach rebel.

Jess sighed. For the baby, she should eat. Opening her eyes, she noticed a light on a fingertip panel in the sofa arm. "Yes?" she asked.

"Welcome back, Captain Fernández," Matrix said pleasantly. "Can I get you anything?"

"A new stomach," Jess grumbled.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"I'm sorry, but I can't do organ transplants."

She smiled. "How about food? Something bland. Skim milk to drink."

"I can have the kitchen prepare a superb bland meal," Matrix assured her. "Would you like your mail while you wait? You have a message from Doctor Bolton."

Jess almost groaned, but she knew she shouldn't avoid her doctor. "Go ahead."

Sandra's voice crackled. "Captain, please contact me immediately."

Jess waited. "That's it?"

"That is it," Matrix said.

She rubbed her chin. "All right. Contact Doctor Bolton. She's on the *Silver Tide,* in orbit."

"Message sent. Would you like anything else?"

Jess still felt unprepared for this, even after thinking about it for days. But she made herself answer. "Yes. Get me the Allied embassy."

"One moment, please." After several minutes, during which Jess sat like a lump, Matrix said, "I have Paige Lowell from the embassy."

"Thanks. Put her on audio." Although Jess had always liked Paige, right now she didn't feel up to facing the young woman's flawless perfection. Somehow the incomparably beautiful Paige managed simultaneously to appear as elegant as an old-money heiress and as wholesome as the girl next door. Add to that her formidable education and rapid advancement in the diplomatic corps, and she could give even the most confident person an inferiority complex.

A lovely voice floated into the air, cultured and gracious. "Hello, Captain Fernández. Welcome back to Icelos."

"Hi, Paige," Jess said. Then she winced. She had never quite figured out when she and Paige were on a first name basis and when they were being formal. So she added, "Please call me Jess."

"It would be my pleasure. What can we do for you?"

Jess steeled herself. "I'd like to see Ambassador Ko. If he's still here." Cephean protocol required the Allied embassy on Icelos contact the Cephean embassy here if Jess wanted to talk to Ghar, even though she already knew the code for his private comm.

"I will be happy to inquire if his Excellency can meet with you," Paige said.

"Thanks. I appreciate it." Jess paused, too tired to think of small talk. "Good-night."

"Good-night, Jess. Have a pleasant evening."

After they cut the connection, Jess raked her hand through her hair. Would Ghar respond? More likely, he wanted to forget their night together.

Matrix suddenly spoke. "I have Doctor Bolton waiting."

Jess winced. "Just put her on audio. No visual." If Sandra saw her fatigue, she would launch into a lecture.

"Incoming," Matrix said.

Sandra's voice cut the air. "Jess, are you all right?"

"I'm fine." Jess shifted on the couch. "Why?"

"You've been sick so much it triggered an alert in your quarters on the ship. Why didn't you tell me how bad it was?"

Jess shrugged, then remembered Sandra couldn't see. "It's not bad. I've kept some food down."

The doctor clucked at her. "You're too stoic. I gave Matrix an anti-nausea prescription. Take it."

Jess was too tired to argue. "All right."

More gently, Sandra said, "Are you really okay?"

Jess felt her emotional defenses going up. "I'm fine."

"You keep telling me that. Why don't I believe it?"

Because you know me too well. Jess saw a tray rising up inside a glass column that supported the table. A panel in the table slid open and the tray came to the top. Dinner sat before her, pasta and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

vegetables on china. Milk filled a crystal goblet, and a vase held an orchid.

Jess shook her head, incredulous. She had grown up with so little, the fifth child of a Spanish father and Portuguese mother who lived in London. Her parents had been wanderers, only two in the millions of displaced tech workers, all scratching for jobs while unemployment in the information sector spiraled. With more and more intelligent machines able to replace humans, the need for infotech workers had plunged. Like many others, her parents ended up in an arbitrary urban center, scraping by with low-level jobs.

But in this modern age, a wealth of new jobs existed, including those on the frontier among the stars. Hard work and scholarships had made it possible for Jess to overcome her circumstances, yet even after buying her parents and siblings a new house in an upscale London neighborhood, she found it hard to believe this new life she had earned for her family.

"Jess?" Sandra asked.

She rubbed her eyes. "My dinner is here. I have to go."

The doctor spoke kindly. "Don't push yourself so hard. You deserve a rest. Give yourself some slack."

"All right." The words didn't feel like enough, so she added, "Thanks for the concern."

"You're welcome." Sandra's voice had an odd note, as if she were surprised to hear Jess thank her.

Am I that difficult a patient? Jess wondered if Sandra found their interactions painful too. But if so, why did the doctor persist in giving unasked-for advice? Their lives would be far easier if Sandra would let up on Jess's personal life. Jess doubted that would happen, though. She didn't understand why it mattered to Sandra. Maybe the doctor considered it important to Jess's job performance; ensuring *Silver Tide*'s captain could carry out her duties was one of Sandra's primary responsibilities.

Enough brooding. Jess lifted the tray into her lap, settled back, and made herself eat. True to his word, Matrix had arranged an excellent dinner. The pasta almost melted in her mouth. She wished she could enjoy it more.

Matrix had put a patch with the anti-nausea medicine on the tray. When Jess applied it to her inner elbow, it blended into her skin, turning golden-brown. She rubbed her fingers over the patch, remembering how her skin had evoked taunts in her youth. As the world grew more cosmopolitan, acceptance among races and cultures had improved, but it still wasn't perfect. Jess had learned that lesson the hard way. Circumstances had forced her to become a fighter at a young age, aided by her height, strength, and stubborn refusal to back down from bullies. Friendship had been hard for her in those years, and it had never become easier.

It was strange how life could change. She had always perceived herself as rough-edged, but years later a top modeling agency had offered her a contract, lauding her purportedly "long-limbed grace and exotic style." Her height, unusual even for a high-fashion model, had intrigued them, as had her military rank. That had been the rage back then: sleek, svelte fashion with an undertone of soldierly power. Flustered, she had thanked them but turned down the job, far more at home with starship engines than runways.

"I have Ambassador Ko on your private line," Matrix announced.

Jess swallowed so fast she choked. Sitting up, she cleared her throat. "Put him on."

"Audio, visual, or both?"

She wasn't ready to face him on visual. But they couldn't talk, and to use sign language they had to see each other. "Did the ambassador request visual?"

"His human translator contacted me by audio," Matrix said.

Thank you, Ghar. "Just put on the audio then."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Incoming," Matrix said.

Ghar's translator spoke, his resonant voice filling the air. "My greetings, Captain Fernández."

"Good evening, Your Excellency."

"How long does Icelos have the fortune of your company?"

That sounded like he was glad to hear from her. Then again, Ghar was a diplomat. He had to sound pleasant.

"I'm here two days." Jess hesitated. "I thought if you were free, we might, uh . . . meet for dinner." She winced at the clumsy invitation. As the Ambassador from Cepheus to the Allied Worlds, Ghar spent most of his time on Earth. When he traveled, he booked his commitments far in advance, and his visits to Icelos were packed with obligations. She waited, her shoulders hunched in anticipation of his refusal.

"Dinner would be acceptable," he answered. "Shall we meet at the Junction in half an hour?"

Jess released the breath she had been holding. He didn't exactly sound overjoyed, but at least he hadn't refused. "Yes. Half an hour."

The Junction reminded Jess of a ski lodge, with its big fireplace and old-fashioned bar. Located at the base of the cliffs outside town, it served the human visitors on Icelos, a sort of last stop before striking out into Cephean territory. Jess doubted Ghar wanted to eat here; he couldn't sit in the chairs and he disliked the food. More likely, he wanted to take her to the Cephean settlement where he lived when visiting Icelos.

Jess waited by the bar, watching musicians play on the stage across the room. She was too restless to stand still for long. The med patch was working; she hadn't felt this good in weeks. Finally she decided to head into the cliffs. She knew the route Ghar took, so she could meet him on the way. Despite the strange situation, she looked forward to seeing him.

Cold air hit her face as she left the lodge. She had worn a sweater over her uniform, a long coat, and heavy boots, but she still shivered with the chill. It never ceased to amaze her how Cepheans thrived in this climate. Of course, she didn't have a four-inch pelt covering her body.

The road wound steeply up into the mountains. Gold posts stood at intervals, made from fluted metal, with smoked-glass lamps hanging from their tops, casting ghostly light. On her left, a cliff rose into the darkness: on the right, a wall at chest height bordered the road. Beyond it, a canyon plunged down for over a kilometer, fading into a heavy mist. Snow crunched under her boots, deeper here where no machines cleared the lane. Cepheans liked it this way.

Eons ago this land had been flat. Underground rivers had hollowed it into a maze of buried limestone caverns. Water rich with bicarbonate and calcium ions dripped from cavern ceilings, hardening into stalactites like huge icicles of rock, or falling to the ground and building up conical stalagmites. Eventually the land sheered upward, buckling into mountains honeycombed by caves. It made an eerily beautiful landscape, haunting and unforgettable.

Jess had seen how it unsettled human visitors here to know the Cepheans chose this forbidding landscape for their home when they could easily have settled the plains instead. Cepheans lived vertically instead of horizontally, a difference hard to fathom for a species with only two arms. The Cepheans' blunt refusal to acknowledge that their way of life might not suit everyone exacerbated the unease they created in their human neighbors.

A distant voice startled Jess out of her reverie. She paused, listening. The voice hadn't sounded Cephean, but few humans came up here even in the day, and at night they avoided the desolate road like a plague.

Up ahead, a path branched off this main one. She went over and peered

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

down the trail, but the dim light made it hard to see. Was someone in trouble? Concerned, she headed down the path. The cliffs on either side leaned inward and met about a meter above her head. Stretching out her arms, she could touch the walls of rock on either side. Limestone caves glistened on either side, with stalactites and stalagmites glazed by frost like stone icicles, a wonderland of sparkling stone lace. She doubted any human explorer had yet mapped the full warren of passages up here. The serenity and deep silence appealed to her, reminding her of the silent expanses of interstellar space.

She neither saw nor heard anyone, though, and she couldn't spend too long here, lest she miss Ghar on the main path. Finally she headed back. As she passed a cave on her right, a glint behind a stalagmite caught her eye. It came from . . . what? A small cage? It was so well hidden, she had missed it before. Pausing, she stepped into the cave and knelt by the cage.

Mewling greeted her. A furry white animal butted its head against the bars, its pointed ears quirked forward. It resembled a comalkos, a popular pet among Cepheans, possibly descended from an early form of Earth feline. Looking more closely, she realized it actually was a kitten.

"What are you doing out here?" She scratched its head, pushing her fingers through the bars. It purred at her.

Scraping sounds caught her attention. Peering around, she realized the cave held many cages, all with cats. She doubted they belonged here. And she had heard a voice before—

Responding with instincts tempered by decades of experience, Jess jumped up and took off, striding back to the main road. She could come back with security officers from town. If the animals were legal, no problem. But hiding cats in these mountains was too strange to ignore.

Her footsteps crunched on rock. The natural chambers on either side of the path magnified sound—and so Jess distinctly heard the words, even from some distance behind her:

"Shit. She saw the cages."

Jess didn't pause to question—she just burst into a run.

She never heard the knife sing through the air, but she couldn't miss the crackle as it sliced her overcoat and sweater. The blade cut deep into her side. Another knife hit her leg, ripping through her uniform. Lord only knew how those blades were made, if they could so easily rip through layers of reinforced cloth. Part of her mind instinctively recoiled from the attack, but the rest of her concentration narrowed into a tight focus as her training took over. It happened too fast for her to feel pain. Yet.

As she ran, the tatters of her overcoat flapped around her legs, making her stumble. Jess yanked off the coat and threw it down, never slowing. Her injured leg felt like putty, and dizziness threatened. At the back of her mind, she thought of the life she had to protect, the child inside of her, and she managed another spurt of speed.

By the time Jess reached the main path, her sprint had turned into a stagger. Her heart was pounding so hard, her entire body shook with it. She lurched across the road and hit the wall that separated it from the chasm. Before she could catch her balance, hands grabbed her from behind and swung her around, slamming her against the wall. Jess found herself staring at a tall man who looked like his name ought to be Buzz, as in an electrified chain-saw,

"Now you've done it," he said through clenched teeth. Two more people came out of the side path and sprinted toward them, a stocky man with red hair and a gaunt woman.

Jess strained to breathe. "What do you want?"

Instead of answering, Buzz heaved her upward. In that instant, the woman

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

reached them. Without hesitation, she aided Buzz, yanking up Jess's legs, sending pain blazing through the wound. Jess's icy calm snapped into the cold fury that came over her in combat. She smacked her hands against Buzz's elbows and shoved inward, breaking his hold. At the same time, she brought up her knee *hard.* He choked, dropping his arms and doubling up, his face contorted. As the woman shoved Jess up the wall, Jess kicked out at her. A loud crack rent the air and the woman shouted, falling backward, her left hand clenched on her right arm, which was bent now at an odd angle.

Jess had no time to wonder why the bloody hell they wanted to kill her. The second man was already lunging at her, bringing down the knife-edge of his hand. He mistimed the blow, as fighters often did in unfamiliar gravity. With her more extensive training, Jess easily blocked it, but she still reeled under the impact when the blow hit her arm.

Buzz was coming back at her now, his face set in hard lines, and the woman wasn't far behind him. As Jess fought off the second man, her muscles straining, Buzz caught her again. With the woman's help, he pushed Jess up the wall. Jess tried to stop them, tried to wrench free, but she couldn't take on three at once, not with her injuries. Her leg responded only sluggishly and a deep burning seared her side. They pushed her up the wall—

And her hips cleared the top.

Jess went rigid, with nothing but air and a canyon at her back. In that moment, as she faced her death, she thought with cold clarity, *You have no right.* It enraged her that they could so cavalierly murder the mystery child she had come to treasure. She twisted *hard,* to the side, toward the road. Her efforts wrenched her out of their grip, but—ah, no!—she fell, fell, *fell*—

And hit the road with a crash that slammed out the air in her lungs. A man's scream reverberated in the air, splitting the night. Jess jerked up her head—

And froze.

Caught in the light from a lamp, a giant towered above them. Fiery red-gold fur covered his body and a mane of curls swept back from his face to his shoulders. Huge muscles rippled in his legs and arms, visible through his trousers and tunic. His shoulders had immense breadth and width, with massive blades that extended down his body to accommodate his second pair of arms. His lips were drawn back, baring fangs more than two inches long. His tail whipped through the air, six feet long and as thick as a man's body where it met his back. His lower arms were reaching for what his upper pair already held high over his head: the man Buzz.

As Jess stared, the ambassador from Cepheus to Earth threw his human captive into the canyon.

III
Cavern of Ladders

Jess drifted awake, warm but unaccountably stiff. Why did her quarters have a musky scent? *Silver Tide* usually smelled sanitized. She stretched—and pain shot through her body.

"Ah!" She snapped awake. Oh, hell. She wasn't on *Silver Tide*. She was about to be hefted into a canyon.

Opening her eyes, she stared across a dimly lit room; no cliff, just a polished stone chamber. The tables and desks were double-tiered, designed for two pairs of arms, and a few feet taller than what humans would build. She was lying on a stone floor, on a rug, with her back against a padded wall. Another rug covered her, soft on her skin. Jess recognized the furs. Cepheans made them from a silken material they sheared off an animal called the abryr, one of the few Cephean words humans could pronounce, said with a growl in the throat.

Despite the cushion of blankets, the ground was rough beneath her. A ridge ran under her waist and another under

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

her torso. She wore nothing except a shift and two bandages, one around her waist and the other around her thigh.

Memory returned: cats, the attack, Ghar. She had lost so much blood; then she had lost consciousness.

The wall behind her shifted.

For an instant Jess was too startled to move. Then she rolled onto her back, carefully, favoring her injuries. The "wall" behind her was alive.

Oh, Lord. She was staring at the chest of a Cephean sleeping on his side. A large Cephean. The "ridges" she had felt under her body were his arms; he was holding her around her waist and torso. She lay in a cage of limbs, four to be exact. It was so strange, and so unexpected, that she couldn't even react at first.

Finally she said, "Ghar?" Her voice rasped.

He continued to sleep.

She tried again. "Ghar? Can you hear me?"

His lashes lifted, revealing two brown eyes, dark and liquid. He blinked as if trying to fathom her presence. Then his hands shifted, his claws retracted so he didn't jab her. He moved them against her back, signing in the language used by the deaf. It was the method of conversing they had tried before, a playful experiment that had ended up communicating far more than they had intended, or at least more than they had been willing to admit.

Do you hurt? he asked.

Jess was too self-conscious to think how she felt about his touching her, beyond her confusion at the situation and his presence. She signed against his chest, her fingers buried in his fur. *I'm all right. Where is this?*

You came here the last time you visited. His fingers stilled. Then, carefully, he added, *Maybe you forgot.*

Oh. Now she recognized the place. His rooms. They had spent the night here, on this pile of blankets in fact. He had just offered her a chance to pretend it never happened. She wondered how he would explain, if she chose to develop amnesia, why she was in bed with him now.

I remember, she signed.

The rigid muscles in his arms relaxed. *I too.*

I have another memory, she signed. *But it must be a mistake.*

What memory?

You threw a man into the chasm.

His hand made a claw on her back. *Your memory is not a mistake.*

She stared at him. *Ghar, why?*

You were covered with blood, one breath from dying.

Grateful as she was at his intervention, her unease grew as she absorbed the implications of his actions. The few times a Cephean had injured a human, it had provoked outrage on Earth; reports of the incidents glittered with invective, their censure stretching like a metallic tissue that looked strong but ripped easily, exposing the underlying panic humans felt when confronted by neighbors who were just human enough to make their immense differences terrifying. What would happen when it became known that the Cephean ambassador, the one they were supposed to trust, had murdered a man?

Jess signed slowly. *If you hadn't come, I would be dead. I am grateful, more than I can say. But we have trouble.*

He answered tiredly. *Your authorities demand my extradition.*

How long have I've been here?

About two Icelos days.

Good Lord. Twenty-two hours. Her ship would be behind schedule now. *Why didn't my crew take me?*

They wanted to.

What stopped them?

He paused. *That answer connects to my second crime.*

What second crime?

Holding a Space Corps officer hostage.

Bloody hell. *I'm not a hostage.*

They think you are.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

You won't let them see me?

His intransigence came through his signing. *No.*

Ghar, this is nuts.

They might harm you.

Jess didn't know what to think. She had believed he would want to forget what happened; never had she expected him to react with the same possessive intensity a Cephean would direct toward his Cephean mate.

He signed on her back. *Why were those people trying to kill you?*

I don't know. I only saw a bunch of cats.

Cats?

In cages, hidden in a cave. She tensed. *What happened after I saw you on the road?*

Your other attackers ran. I pursued.

And then? Her hand clenched in his fur.

Ghar caught her fingers. *I killed no one else.*

Jess let out the breath she had been holding. *That is good to know.*

His growl rumbled. *I might have killed them, if you hadn't needed my attention more.*

Well, no one had ever claimed Cepheans were peaceful. But she would have never predicted this from Ghar.

Your authorities want proof you still live, he added.

I'm not surprised. She hoped Sandra hadn't told them about the pregnancy, but she knew if the doctor feared for Jess's life, Sandra would speak up regardless of how confidential Jess wanted the matter. The security people on *Silver Tide* would make the obvious assumption: if they knew, Ghar probably did as well. No one could fully predict his response, but he obviously was no more likely than anyone else to believe he was the only candidate for proud papa. Given his recent behavior, Security had good reason to think Jess's life might be at risk.

Although Jess didn't think Ghar would kill her, she couldn't be sure. About one thing she had no doubt: if Ghar murdered a lieutenant colonel in the Space Corps, a starship commander who served as an Earth-Cepheus liaison, all hell would break loose.

Jess signed against his chest. *I must return to* Silver Tide. She tried to sit up, and pain shot through her torso, followed by a rush of nausea. With a groan, she lay down again.

He set his lower arm across her waist, pinning her. *You must go nowhere.*

Jess recognized her nausea. Apparently Sandra's med patch wasn't 100 percent effective. Either that, or this was more serious than morning sickness. What if she had lost the baby? *No.* She couldn't have miscarried. Surely Ghar would have known. But would he understand? Jess didn't know how to ask. She was vulnerable now, undefended if he thought she had betrayed him.

Who patched me up after the attack? she asked.

Me.

So he hadn't let a Cephean doctor see her. It made sense; it would have provoked questions he probably wanted to avoid. *Did I have other injuries?* she asked. *Bleeding anywhere else?*

No. Only the two wounds.

Relief poured over her. Still, she needed to be sure. *I should be checked by a human doctor.*

A growl rumbled in his throat. *You should stay here.*

She tried to decipher his expression. Although fur covered his face, it wasn't long except where a human man would have a beard. Most humans found Cephean faces difficult to read, but she had learned to judge Ghar's moods. Right now he looked uncertain.

She signed, *Your government can't like my being here any more than mine does.*

His gaze didn't waver. *Bor supports my decisions.*

Bor? As in Bor Chi? *You mean the Cephean First Councilor?*

Yes.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Good Lord. If Ghar called one of the most influential leaders on his home world by a personal name, he was placed even higher in his government than she had realized. *Bor Chi gives you his protection?*

In public. His fingers slowed on her back. *In private, he asks if I am insane.*

But he stands by your decisions?

Yes.

Why?

He trusts my judgment. After a pause, Ghar added, *He is also the older brother of my aunt's husband.*

So. Kin ties. They were strong among Cepheans, apparently even in a hostage situation. Except she wasn't a hostage. At least she hoped she wasn't.

Why won't you let a human doctor see me? she asked.

He stiffened. *Humans tried to kill you.*

Three people tried to kill me. Not all humans.

Maybe.

Why do you suddenly distrust humans?

His claws scraped her back. *I have always distrusted humans.*

That gave her pause. *It never showed.*

My job was to overcome distrust.

What has changed?

Overcoming distrust is a euphemism for taking risks. He regarded her steadily. *I have no intention to risk your life.*

Jess felt as if a crystal sculpture of great value were shattering before her eyes, falling as she grabbed for it, her lunge too late to stop its destruction. *You can't let the trust between our peoples—a trust you've worked for ten years to build—be destroyed this way.*

I have no choice.

Yes, you do. Ghar, you do your job well. We need you. Both my people and yours.

It's too late, Jess.

It isn't! I can go back. Tell the truth.

A rumble thrummed within his chest. *It isn't safe.*

Jess scowled at him, holding it long enough so he had plenty of time to decipher the expression. *It is my decision. Not yours.*

He answered with only another rumble, but she recognized that growl. He always made it in protest, when he was about to give in on an argument but didn't want to tell her.

I will talk to the authorities, she added. *Tell them you saved my life.*

I don't want you to go back.

As much as she wanted to deny his suspicions, Jess had to consider them. Few humans visited this colony, and the Port Authority kept tabs on all visitors, which probably meant they knew the identities of the people who tried to kill her. If the PA had a more covert link to her attackers, such as turning a blind eye to their activities in return for bribes, she could end up dead if she contacted them, an unfortunate "incident" that would be blamed on Ghar.

She frowned. If she discussed the situation with anyone on her ship, over a distance comm, the PA might have a way to eavesdrop. Considering, she signed, *We can bring someone here from* Silver Tide.

It isn't possible to contact them.

Jess wasn't buying it. Although Ghar had no obvious comm in his home, she knew perfectly well that his apartment had modern technology; it was just hidden to make his home fit with the spare ambiance of the colony. She thumped her fist on his chest. *We need to do this, Ghar.*

After a silence, he signed, *No military personnel.*

All right. She knew him well enough to recognize that his lack of an overt refusal was the closest he would come to expressing his acceptance. She thought about her crew. Who among the civilians could best deal with what looked like some bizarre illegal import operation? Jack O'Brien, possibly.

How about the Allied Services? she asked. *They work with smugglers.*

No more than three of them. Con-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cern showed in his gaze. *Do you hurt? They can bring medicine to blunt the pain.*

I'm fine. She didn't want to risk any drugs during her pregnancy unless they were absolutely necessary, but this wasn't the time to explain why.

Just when *was* a good time, she had no idea.

Even in the staid uniform of the Allied Services, with his unruly hair combed, Jack O'Brien still looked like a pirate to Jess. He came with two assistants, a man and woman, both in AS uniforms. All three settled on a rug in the main room of Ghar's home.

Jess sat with them, wearing a shift made from one of Ghar's tunics. Although on him it reached only to his hips, on her it came below the knees. She had put her arms through the upper sleeves, rolling them up to free her hands. To pull in the billows of cloth, she tied the lower sleeves behind her back—loosely. Even if her uniform hadn't been ripped and bloodied, its tight fit would have bothered her. She was almost three months pregnant; soon she could no longer keep her situation private.

Ghar sat to her right on a blocky stool, looming over them, silent and formidable. No one missed the hostility in his position or posture.

"Ambassador Ko saved my life," Jess continued, speaking to Jack O'Brien. His female assistant served as translator, signing for Ghar, while his male assistant recorded their words on a palmtop.

Jack regarded her intently, as if trying to decipher what lay behind her words. "Then you and his Excellency were already planning to meet that night?"

"That's right." She suspected Jack had been trained to read body language; in his line of work, the skill would be invaluable. He might be able to tell if she were lying or withholding information. So she just said, "Ambassador Ko and I often work together."

Jack nodded, his gestures restrained. He didn't give the impression he disbelieved her; his wariness seemed more due to Ghar's presence. As he spoke, his assistant signed. "We'll give your full statement to the authorities."

"Good." Jess exhaled. "This situation is already too volatile. We need to cool it down."

Jack nodded. "Your talking to us ought to alleviate matters." He spoke with an assurance probably meant more to ease Ghar's enmity than to reassure her.

"I hope so." Jess shook her head. "All over some cats. I don't get it."

"They aren't cats." He leaned forward. "You stumbled into a delivery by a cartel the AS has been after for years. My department has never worked on that case, so our data is limited, but we do know the cartel has moved business through here before. The port is small and no one pays it much attention." Dryly he added, "The smugglers probably never expected the captain of a major Allied starship to show up."

It still made no sense to Jess. "Why not just get a permit to import comalki? It can't be all that expensive."

"Those aren't comalki."

"They looked like cats."

Jack pushed his hand through his hair, making them revert to their more usual disheveled state. "The animals carry a virus. It's what the cartel actually sells. If the altered comalkos bites you, you're sick." Glancing at Ghar, he shifted his weight. "The virus is deadly to Cepheans."

Ghar signed. "How deadly?"

Jack blew out a gust of air. "Let those animals loose here and you'd have a killer plague, fast and vicious."

Jess stared at him. Was the cartel insane? Icelos was a world of the Skolian Imperialate, which had a formidable military that protected its own with legendary ferocity. Most Skolians were human, and Jess had no idea how they felt about Cepheans—but if they learned an

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Earth cartel had killed an entire colony of their citizens, *any* citizens, their retribution would be fast and harsh. The Allied Worlds of Earth would have little chance against them.

She clenched her hand in the cloth of her shift. "The cartel is out of their minds."

"Not crazy. Greedy." Jack's face had paled. "They'd have received a monstrous payment for that shipment from a fanatic group that wants to kill all the Cepheans. And hell, if it had started a war, it would've benefited the cartel's black market." Turning, he spoke more quietly to Ghar. "Your Excellency, be assured that these extremists in no way represent the Allied Worlds of Earth. We greatly value our relations with your people and wish to continue in good will."

Ghar answered with sharp signs. *Such fanatics also exist among my people. They feel similarly about humans.*

Jess tried to gauge his mood, but she couldn't read him. He made no sound as Jack's assistant translated his signs.

Jack spoke grimly. "We'll punish the cartel. Count on it."

Ghar didn't answer, he just watched the AS agents. Now Jess recognized his stare; he was only thinking, but on the face of a Cephean, the expression looked murderous. When Jack shifted uneasily, she spoke quickly, to defuse the tension. "Are those altered comalki immune to this virus?"

Jack glanced at her, relief in his gaze. "They aren't really comalki either. They're chimeras."

The word sounded vaguely familiar. "I take it you don't mean that in the literary sense," Jess said.

"In a biological sense," Jack said. "To engineer a chimera, you mix DNA from two species."

She finally remembered where she had heard the word, in a long-ago college course. "Isn't a chimera some kind of mythological beast—head of a lion, tail of a dragon or something? Breathed fire at people it didn't like."

He smiled slightly. "That's where it originated. In biology it refers to a hybrid animal. Chimeras are easiest to make using similar species, like lions and tigers, or comalki and cats."

She could see where he was going. "So this virus would kill either a comalkos or a cat, but the chimera survives."

"That's right." He glanced uneasily at Ghar. "Cepheans like comalki, so the cartel found a variant of the animal that could carry the virus."

"Gods," Jess muttered.

Ghar growled deep in his throat, his lower hands fisted on his knees. He signed with his upper. "Why don't you stop these smugglers?"

Jack sat up straighter, his posture stiffened as if he were preparing to protect himself. "They've managed to stay a step ahead of us. But if Captain Fernández testifies against them, it could give us the chink we need to bring down their operation."

Jess thought about three complete strangers trying to throw her into the canyon, killing not only her, but also her child. She regarded Jack steadily. "I will testify."

Ghar snarled, and she needed no translator to know he said, 'No!' in Cephean. His lips drew back and his teeth glinted like daggers. Then he bared his claws, which were longer than his fangs.

Jack blanched, but he didn't back down. "We need her testimony."

Jess signed to Ghar. *I will be in no danger.*

He answered in his own language, a series of growls. She had trouble with the words, but it sounded like the equivalent of "They will kill you."

"They won't hurt me." She spoke slowly so he could decipher what, to him, was a high-pitched, sing-song lilt. "I will have protection."

Jack O'Brien was staring at her. "You *understand* him?"

Jess glanced at him, distracted.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Some."

He whistled. "That's supposed to be impossible."

Thinking of her child, she answered dryly. "Many things are impossible. That doesn't stop them from happening." She had to change the subject before Ghar decided Jack was endangering her life and hefted him out a window. "How did the cartel get started?"

"A wealthy collector set it up about thirty-five years ago," Jack said. "He wanted Cephean rugs in his collection."

"Why didn't he just buy them?" she asked, incredulous. Granted the rugs were expensive, but their prices weren't exorbitant, especially for the wealthy.

"He didn't want abryr rugs." Jack glanced at Ghar as if weighing whether to continue. "He wanted Cephean pelts."

Jess stiffened as if she had been kicked. She had heard stories of people who skinned Cepheans for their fur, but she had never credited them before.

Ghar signed hard, using all four hands to emphasize his message. *Humans are sick.*

Please don't judge us all by the aberrations of a few, Jess signed. *I'm human too.*

He answered in his own language. "You are unique."

Jack was watching with them open curiosity—until Ghar fixed him with a hostile glare. Flushing, Jack immediately recomposed his face to show a lack of interest.

Ghar spoke through the translator. "Did this collector get his pelts?"

Jack shook his head. "No. None. Our authorities caught the hunters he sent to Cepheus. But none of the hunters would talk. We couldn't gather the evidence to convict him."

"He went free?" Ghar's angry incredulity showed in his the motion of his hands. "To murder again?"

Jack hesitated. "He didn't send any more hunters."

"You evade my question," Ghar said.

"You won't like the answer."

"Tell it anyway."

Jack exhaled. "He wanted specialty pelts."

A foreboding was building within Jess, and this time her nausea didn't come from pregnancy. "What kind of specialty?"

Jack turned to her. "From Cepheans-human chimeras. It would give fur with the richness of Cephean pelts, the silkiness of human hair, and colors you couldn't get from a pure Cephean."

Jess was gripping the sleeves of her shift so tightly, her fingernails gouged her palms. "Are you telling me this madman created Cephean-human chimeras and *skinned* them?"

Jack answered quietly. "No. His people never succeeded in making a viable chimera."

Ghar signed sharply. "Why didn't you stop him?"

"We had no *proof.*" Frustration showed on Jack's face. "To create a smooth pelt, the chimera would have to express Cephean genes, yet still have the desired human traits. That kind of selectivity requires methods more sophisticated than we have now, decades later. Back then it couldn't be done at all." He shook his head. "What could we arrest him on? Researching chimeras isn't illegal."

The light glinted on Ghar's fangs. "Only a human would let such a monster go free."

"He was arrested." Jack gave him a wintry smile. "For evading interstellar import taxes. He did time."

"Not enough." Ghar regarded him coldly. "It couldn't have been enough."

No, Jess thought. *It could never be enough.*

Windows in the main room of Ghar's home overlooked a cavern. The Cephean colonists lived in apartments cut from the walls of the great cave, their homes stacked up for ten stories, Cephean stories, double the height hu-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

mans built. No lifts served the cavern; instead, vertical staircases ran up the walls like ladders, forming throughways much as humans built roads. Among the crowds of Cepheans climbing in the city of ladders, Jess saw many pelt colors, from common browns to rarer grays. None resembled the dramatic fiery color of Ghar's fur.

A rustle came from behind Jess. In her side vision, she saw Ghar join her at the window. They stood together, gazing at the cavern. It felt odd having him tower over her; Jess was used to being taller than most people.

After a moment Jess turned to him. He signed to her. *Do your injuries hurt?*

I'm all right. Although she ached all over, she could handle it. *You've been very quiet about what Jack O'Brien told us.*

He unsheathed his claws, and they curved like miniature scythes. *What is there to say? That I want to kill humans?*

Jess stiffened.

Not you. His signing slowed, and he touched her cheek with his claw. *I wish to do to humans what I hate them wanting to do to Cepheans.*

Jess froze, acutely aware of the honed point against her skin.

Watching her, Ghar sheathed his claws. Then he lowered himself onto a tall stool by the window. Even seated, he was slightly taller than Jess. He drew her forward until she was standing between his legs, then locked his lower arms around her waist and signed with his upper. *Bor Chi has ruled that I have no guilt in the death of the smuggler, but your people don't agree. It means I can never return to the territory of the Allied Worlds. When you leave here, I can see you no more.* He paused. *So you will not leave.*

Jess knew he spoke in anger. If he forced her to stay, it would be a disaster, one she doubted he wanted any more than she did. *I have to go. But I will find ways to visit you.*

No.

You may not feel that way when you hear what I have to say.

Why?

Will you first answer a question?

His gaze searched her face. *Ask.*

Do you know your parents?

Of course.

That stopped her. If he knew his parents, her suspicions had no basis. *Do you see them often?*

They died.

Jess signed regret. *I am sorry.*

His tail twitched through the air. *I never really knew them. It happened right after my birth. Our transport crashed in the snow. Hikers found me two days later.*

Jess stared at him. *How could a newborn survive alone, in the snow, for two days?*

I don't know. But I did.

She braced herself. *I don't believe the child in that transport lived. Someone took his body and put you in his place.*

His lips drew back in an expression that, if Jess hadn't known meant amusement, she would have believed was a snarl. *Your imagination is fertile,* he signed.

So is my body.

What?

Jess took a deep breath. *During my last visit to the colony you were the only*—She stopped. *My only companion.*

His tail curled over his shoulder and its tip stroked her hair. *I know you don't expect me to share you. I wouldn't have been with you otherwise.*

I'm glad you know that, Ghar. Because I'm pregnant.

He regarded her blankly. *What?*

I'm pregnant.

I have a trouble with your signing. I don't understand your word.

Pregnant. I'm going to have a baby. Yours.

His growl rumbled. *It isn't amusing, Jess.*

She laid his hand on her abdomen. *I*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

carry a child.

Ghar pulled back his hand, his claws unsheathing, points glittering. *If you have a child, it is not mine.*

Jess hoped she hadn't just signed her death warrant. *There was no one else. It must be yours.*

It cannot be. I am not human.

Yes. You are.

His tail snapped through the air like a whip. *Stop mocking me.*

I'm not. Jess pushed back the tendrils of hair that had curled around her face. *Ever since I learned about the baby, I've been trying to understand. After we talked to Jack, I knew.*

You think this sick collector made me for his collection.

Yes. But his people must have decided they couldn't go through with it, raising you to be murdered for your fur.

This is how you explain your infidelity? His claws glinted as he signed. *I would have expected better from you.*

I can prove it. The doctor on my ship can compare our DNA with the fetus. She'll know, Ghar.

She will say what you command her to say.

You know me better than that.

I thought I did. I was wrong.

You weren't wrong.

So you claim. Ghar considered her. *Very well. I will do these tests.* His gaze turned implacable. *Pray they don't prove you a liar.*

Jess watched from Ghar's apartment high in the cavern, while far below Sandra walked with her Cephean escort. Next to their towering forms, the doctor looked like a silver-haired child. Stairs led up to Ghar's apartment, turning into ladders as the walls became vertical. It took a long time for Sandra and her escort to climb, but finally they disappeared from Jess's view behind a ridge in the cavern. She waited, trying in vain to keep her muscles from knotting any tighter with her tension.

The front door of the apartment opened. A few moments later Sandra appeared in the wide entrance of the room where Jess waited. The doctor was alone; as instructed, the escort had left after delivering her. It was the second time in the past day Jess had seen her.

A heavy tread came from across the room. Turning, Jess saw Ghar in the entrance to an inner chamber. He stood with his lower arms braced against the sides of the doorway and his upper arms against the top. His tail whipped around his body, then settled down.

Sandra's gaze flicked from Ghar to Jess. "I've finished the analysis." She paused as Jess signed for Ghar. Then Sandra spoke directly to him. "I am deeply sorry, your Excellency."

Ghar watched Jess sign, then turned to Sandra. "Why sorry?"

The doctor spoke quietly. "Someone played with your genetics on a scale like none I've ever seen. You have human DNA throughout your body. The mingling is so extensive I doubt it can be fully mapped." She took a breath. "You're a chimera, Ambassador Ko. You combine the heredity of two people. And one of those is human."

"No!" Ghar signed.

"I'm sorry," Sandra repeated softly.

He signed fast and sharp. "If my DNA had anomalies, it would have shown up in my ID scans."

"ID scans don't go into enough detail. Cephean DNA is barely different from human, less than 2 percent." Sandra stopped while Jess caught up with her signing. When the doctor spoke again, excitement leaked into her voice. "Your DNA map is incredible. The subtlety is like nothing I've ever seen. To reveal the differences between yours and that of a normal Cephean, I had to do a much more extensive set of tests than any you've probably had before."

Ghar said nothing, just stood like a statue.

"And the baby?" Jess was so wound up she forgot to sign her question.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Then, remembering, she repeated it for Ghar.

"Most of Ambassador Ko's tissues express Cephean genes," Sandra said. "But his germ cells are human. Chimeras are usually sterile, but they don't have to be. He produces some functional human sperm." She glanced at Ghar. "Your Excellency, you are the father of Captain Fernández's child."

Ghar answered in his own language. "It is impossible." His growls rolled through the room.

As Sandra's forehead furrowed, Jess said, "He doesn't believe you."

Sandra regarded them both with her painful compassion. "I can only give you the results. I can't make them what you want to hear."

Jess started to sign the words to Ghar, but he abruptly turned and left the room.

Sandra exhaled, looking at Jess. "I'm sorry. I know I keep saying that, but it's true."

Jess just nodded. What could she say? That she wanted to ram *Silver Tide* down the throat of whoever had done this to Ghar? True as that might be, it solved nothing.

"The results probably explain a lot to him," Sandra said.

"What do you mean?"

"They showed up a slew of anomalies." Sandra shook her head. "For one thing, whoever played with his cells didn't get the lower arms right. Apparently he's had them broken and reset in an attempt to fix them. He has metal rods in both to extend their length to what's normal for a Cephean."

Jess could imagine what Ghar's people would do if they discovered the true reason for his problems. "Sandra, you must keep this confidential."

"Unless you and Ambassador Ko choose otherwise, no one but the three of us will ever know."

Jess hesitated to ask her next question; nothing Sandra could say would make this easier. But her curiosity persisted. "Do you know what Ghar would have been like as a human?"

"Irish, I think. His hair and eyes would be the same color they are now." The doctor looked apologetic. "That's about all I can tell."

As hard as it was to imagine him as human, it *wasn't* impossible. In her mind, Jess could see a burly Irishman striding across green hills on Earth, his red curls whipping back from his face, his beard thick and full. It hurt to envision what could never be.

And Ghar? She couldn't imagine how he would deal with this, knowing he carried within himself the identity of a people he distrusted, even hated now. How would he reconcile his knowledge of the hostile parts that constituted his whole?

"I have to talk to him," Jess said. "Alone."

"And then?"

"I'll come back to *Silver Tide*."

Relief washed across Sandra's face. "I'll send up an air stretcher."

"I can walk."

Sandra gave a familiar scowl. "I have eyes. I can see you hurt."

The last thing Jess wanted was people fussing over her. More than ever, she and Ghar needed privacy now. "I'll be all right." She thought of the many staircases she had to navigate to reach the cavern floor. "I will rest here first, though."

Sandra didn't look thrilled, but she accepted the compromise. "One day. That's all."

After Sandra left, Jess limped through the apartment. She found Ghar in his bedroom, sitting on a stool and staring at nothing. She almost stopped out of reach of his claws; then she decided to trust her judgment and went to stand before him.

Do you want to be alone? she asked.

No. He sheathed his claws and touched her face with his upper left hand. *I thought you lied to explain the baby. I misjudged you. I am sorry.*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

She felt how much that admission cost him. *I understand.*

Will you go back to Silver Tide *with your friend?*

My friend?

The doctor.

She blinked. *Where did you get the idea Sandra Bolton is my friend?*

He moved his lower hands in a horizontal motion, palms down, the closest equivalent Cepheans had to a shrug. *You interact with each other as do humans I have seen who call each other friend.*

All we do is argue.

In my experience, this is not an unusual way for humans to express friendship.

Jess didn't know what to make of that, at least in the context of Sandra. *She drives me nuts.*

She cares what happens to you.

Jess would never have used the word *friendship* for her strained relationship with the doctor. And yet . . . she wasn't sure how to define friendship. She had guarded her emotions for so long, maybe she could no longer see what lay in front of her.

Or sat.

She regarded Ghar silently, aware of him watching her back. To grapple with this business of love, she could have chosen a far less difficult path than involvement with a Cephean. But this was the path she had to walk, and so she would, if she could only figure out how.

Ghar brushed his fingers down her arm. *Incredibly, you and I have made a child. At least for this I am pleased.*

I too. It was the truth. But she couldn't relax with him. Not yet. When he drew her forward, she put her palms against his shoulders, keeping him at bay. He had his lower arms around her, his muscles ridged against her back. She touched the two-inch fang that came down over his lip, white against the curls of his beard. A slightly harder push on the tip of that incisor would draw blood from her finger.

Pulling away her hand, she signed to him. *Does this response of yours mean I need not fear for my life?*

His lips drew back in a snarl, though she knew he was showing dismay rather than rage. Using his upper hands, he signed with determination. *I would never kill you. Never.*

Even if you thought I lied about the child's father?

Even if that. A low rumble came from his chest, not anger, but another emotion, sorrow perhaps. *I would have sent you away and advised Bor to cut ties with Earth.*

I would never betray your trust. Jess spoke evenly. *But if I had, it wouldn't be worth destroying relations between our peoples.*

It was a moment before Ghar responded. *A few days ago I would have agreed. Right now it is hard to remember why I ever wanted to establish trust with your people. It would have been the final blow to discover you had treated what passed between us with such disregard as to end up with another man's child on that same night.* His signing slowed, as if his hands were weary. *In time, my common sense would have prevailed. But by then, the damage may have been beyond repair.*

She gentled her motions. *I understand, Ghar. But I must return to* Silver Tide.

After a long pause, he signed, *You are free to leave.*

Only then did her posture ease. Putting her arms around his neck, she laid her cheek against his shoulder.

He held her with all four arms and signed against her spine, his large hands covering most of her back. *You should have the doctor send someone up with an air-stretcher.*

I don't need one. I'm okay.

You are not 'okay.'

I'm fine.

He growled. *You are as stubborn as a stalagmite.*

Jess tried to laugh, but it caught in her

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

throat. She saw no end to this mess. It had one glimmer of light, the baby. A miracle. But it would be insane to reveal the child's paternity. She had seen the hatred bred by xenophobia. Had Ghar killed one of his own kind, Earth would never have cared and Bor Chi would never have absolved him. She didn't want to imagine what their peoples would say to a child born of a human woman and Cephean male.

Ghar pulled back so he could see her face. He held her shoulders with his upper arms and signed with his lower pair. *Your ship is a metal hull. It can never hold you in the night when loneliness stalks your dreams.*

It is my home.

This could become your home.

Come live with me on Silver Tide.

His growl rumbled. *I would die in your silver cage.*

Jess signed sorrow to him. *If we live together, your people and mine will make our lives hell.*

He watched her with his large eyes. Brown eyes. Human eyes. *Then stay with me this one last night.*

Jess touched his face. *Tonight, I will stay.*

IV
Bridge

Jess maneuvered her bulk through the hatchway to the bridge and floated forward. She had followed Sandra's advice rigorously and rarely spent time in free fall, so she savored these few moments the doctor allowed her. Being weightless offered a much-appreciated relief; at more than eight months pregnant, she was as unwieldy as a cargo barge.

She hauled herself to the command chair and settled in with a grunt. Panels shifted around her, adjusting to her size. In response to her commands, the robot arm that supported the chair carried it through the kilometer-wide bridge hemisphere. She passed a smaller robot arm ridden by one of her officers. When the lieutenant lifted her hand in salute, Jess grinned and saluted back. Then she moved on, until she stopped in the center of the hemisphere.

Jess spoke into her wrist comm. "Commander Carson, have we finished loading the cargo for the Flanders team?"

The voice of Al Carson, her Exec, came out of the comm. "In about five minutes, Captain."

"Excellent." She shifted position, trying to get comfortable. The chair molded to her body, accommodating her efforts.

Suddenly she stiffened, while muscular ripples moved down her abdomen. As if eager to join in, her baby chose that moment to give a hearty kick. Jess couldn't help but laugh. "You're a strong one."

"Ma'am?" Al asked over her comm. "I didn't catch that."

She wondered what Al would think if she told him she was having Braxton-Hicks contractions, the "practice" a woman's body underwent toward the end of pregnancy as it prepared for labor. Knowing Al, he would take it in stride. It wasn't genuine labor; she wouldn't give birth for at least another three weeks.

"The Flanders personnel are aboard," she told Al. "As soon as we finish loading their equipment, we can leave orbit."

"Aye, Captain."

Jess settled back and activated the holoscreens. The bridge went from a vast metal cavern to—nothing. The crew consoles on the hull seemed suspended in space. Dominating the view, a luminous blue world rotated, girdled by silvery rings. Far more distant, a white star pierced space, the parent sun for this iceball world, its light filtered by the screens. *Silver Tide* had stopped here to pick up a team of scientists headed back to Earth.

A familiar longing came over Jess, the wanderlust that had stirred her heart for as long as she could remember. She

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

would have loved to go down to the science station floating in the atmosphere of the planet, don an environment suit, power up a fly-craft, and explore the world firsthand. But she hadn't left *Silver Tide* for months now. Sandra didn't want her to risk acceleration, and Jess's presence on-planet hadn't been necessary during their stops.

"Such a beautiful sight," Al Carson murmured. "Like a sphere of turquoise and sapphire light."

"You sound poetic today," Jess said.

He chuckled. "It happens every now and then."

A twinge of sorrow came to her, one that had caught her often these pasts months, sometimes when she encountered a sight she would have liked to have shared with Ghar, like this one, other times when she saw a family together. She and Ghar spoke on occasion, but it was difficult to arrange the interstellar communication. She wished he could be here, or if not here, then someplace where they could see each other when they had the chance.

They didn't have that option. Although the authorities on Earth had dropped the kidnapping charge against Ghar, the murder accusation remained. At least Jess's testimony had helped bring down the cartel's operation in the colony and ease the outpouring of public anger against Ghar. For all that Cepheans made them uneasy, the people of Earth were horrified by the attempted genocide on Icelos.

Allied Services had acted fast to wipe out the plague chimeras. It had kept the Skolians from declaring open hostilities against Earth, but relations between Cepheus and Earth had still deteriorated. Angered by the murder charge against Ghar, one of their most prominent citizens—one who had prevented the brutal death of an Allied Space Corps officer—the Cephean authorities steadfastly refused to extradite him. Cephean portrayals of Jess were scathing, which incensed the Space Corps. So Ghar remained on Cepheus and the Cephean embassy on Earth remained empty.

The situation disheartened Jess. In the past, hatreds on Earth had burned over race, religion, sexual orientation, and customs. Those differences seemed to fade now, compared to the variations between humans and their altered kin on other worlds. Although Jess and Ghar had never revealed that their relationship went beyond friendship, their acquaintance caused outrage anyway, a response Jess had never experienced in her interracial marriage with the man from Norway.

Nor did her pregnancy sit well with her superiors; she had broken an unwritten code of the Space Corps by remaining pregnant without a spouse. Although no regulations prohibited an officer in her position from giving birth out of wedlock, the brass didn't like it. But where Ghar was concerned, she had few options. Even if her government hadn't considered him a criminal, she and Ghar might not have been able to marry. No one knew; no legal precedents existed. And Jess had no intention of taking vows with someone she didn't love just for the sake of being married.

At her request, the Space Corps kept the identity of her child's father confidential. Although she managed to retain her command, she had been passed over for promotion. She could only work hard and hope the situation improved. She had agreed to the tests requested by the medical team studying her child. It was unheard of for a chimera as complex as Ghar to exist, let alone be fertile, but without him, their studies were limited. Unless Cepheus and Earth reached a truce that allowed their scientists to collaborate again, the secret of how Ghar existed would remain a mystery to Earth.

Al's voice came out of her comm. "Captain, we have the Flanders cargo on board."

"Great. As soon—" Jess stopped, star-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tled as another contraction began, spreading from her lower back up into her abdomen. It was too long and too intense.

"Bloody hell," Jess muttered when it finally eased.

"Captain?" Al asked.

"Commander Carson." Jess paused for a calming breath. "Switch to the contingency plan we discussed."

"Good God!" Al said. "Do you need help, ma'am?"

Jess felt herself redden. "No, no. I'm fine." She was acutely aware of her bridge officers listening. Everyone knew what "contingency plan" meant. She tapped her gauntlet, starting up a procedure she had already programmed into her wrist comp. Then, after another deep breath, she said, "Commander Carson, you're in charge." More softly, to the entire bridge crew, she added, "Take her out gently, ladies and gentlemen. Gently."

A murmur of good wishes came from her crew. Al said, "Good luck, Captain." As tense as he sounded, anticipation also sparked in his words. Jess felt it too—until another pain wrenched through her, this one sharper than the last.

"Ahhh . . ." She struggled to hold back her gasp.

Sandra's voice suddenly snapped out of Jess's comm. "Captain, I'm receiving a page on your emergency channel."

Jess gritted her teeth against the contraction. "I know. I sent it."

"Well, I'll be cheddar in a chugger," Sandra said.

As the pain eased, Jess wondered what the blazes was a "chugger." She directed her chair toward the hatch at the back of the bridge. "I'm coming in."

"Are you sure it's time?" Sandra asked. "You aren't due for weeks."

Jess started to answer, then groaned as another contraction hit.

"Uh . . . I take that as a 'yes,'" Sandra said.

Somehow Jess managed, "You take it right."

"I'm sending an air stretcher for you," Sandra said crisply. "I've dispatched the orderlies."

"I don't need a stretcher." Remembering Ghar's comments about friendship, Jess resisted the urge to grumble at the doctor. "I'm fine. Really." As the contraction finished, she maneuvered out of her chair, which had reached the hatchway. "Just get ready for me, Doc."

"Now!" Sandra said again. "*Push!*"

Jess pushed, clenching the handgrips on the bed. The waves of pain went on and on, and even after they finally ebbed, the merciless pressure remained.

Sandra swore. "That's it. This baby doesn't want to come out. I'm going to operate."

Jess struggled to sit up. "*No.*"

Lines furrowed Sandra's forehead. "You've been in labor for over a *day.* Jess, it's enough. You don't have to do this the way women did before modern medicine."

"Yes, I do." At the moment, Jess had a hard time remembering why she had been determined to carry through with natural childbirth. But damned if she was going to let them cut her open. She moaned as another contraction began. Steeling herself, she dredged up her strength. PUSH.

"It's coming!" Sandra suddenly called. "Jess! Come on! You can do it!"

Jess put in a gargantuan effort—and screamed as pain ripped through her body. Gasping at the sudden release that followed, she heaved herself up to look, breathing hard, her hair tousled wildly around her face—

"I don't believe it," Jess whispered. Sandra was holding a tiny girl with a wrinkled face and a pointy head covered by red-gold curls. As Sandra checked the baby's nostrils, the infant gave a loud wail.

"She's beautiful," Jess rasped. Then she collapsed back onto the bed.

The next moments blurred, as nurses

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cleaned her up and shifted her to a fresh bed. Then Sandra handed her a tiny, incredible bundle. Jess cradled the baby, murmuring. The infant looked up with large blue eyes, as if she recognized her mother's voice. When Jess put her to her breast, the child nursed with gusto. Jess was vaguely aware of Sandra and the others, but her attention was only for this miracle. She closed her eyes, astonished at the uncharacteristic tenderness she felt when she held this small bundle in her combat-trained arms.

Jess didn't realize she had dozed off until someone tapped her shoulder. She opened her eyes to see George Mai standing by her bed. The baby slept, nestled against her side.

George beamed. "The crew sends their congratulations, ma'am."

Jess smiled drowsily. "Give them my thanks."

Sandra appeared next to George. "Captain, you have a message from Cepheus."

Jess came fully awake, her emotions a sudden jumble, apprehensive and eager all at once. "I'll take it on my private line."

Sandra nodded. "I'll set it up."

Jess waited while Sandra made the arrangements. If George thought it strange that the outlawed Cephean ambassador wished to speak with her at a time like this, he kept his questions to himself.

After the doctors left, Jess sat up, holding the baby. She spoke to the air. "Put my call on audio."

The EI that monitored the hospital answered. "Would you like visual?"

Her inclination was to say no, especially after just giving birth. But this wasn't something she and Ghar could do through a translator.

"Yes," she said. "Visual too."

The wall across the room glowed blue, then cleared to show a large image of Ghar. He was seated at a desk in a gleaming office far more modern than his home on Icelos. His upper arms rested on the top of the desk, which was a grid rather than a solid surface, and his lower arms were crossed on a lower shelf visible through the grid. His human translator was just leaving the room.

Ghar waited until he was alone. Then he signed, *Hello, Jess.*

Hello. She showed him the baby. *I thought of naming her Alejandra Ko Fernández. What do you think?*

A beautiful name. Ghar hesitated. *I would say she is a beautiful baby, but I have no idea how human babies should look.*

Jess's face softened into a smile. *She's beautiful.*

After your Doctor Bolton contacted me, I thought to come there, to be with you. He signed with stiff motions. *But as soon as I enter human space, I will be taken into custody.*

Then I will bring Alejandra to Cepheus.

Jess, no. Bring her to Earth. His motions became subdued. *I have decided. I will go to your authorities. Better to resolve this issue of my guilt than have it dividing our peoples.*

Jess bit her lip, worried. As much as she wanted to see Ghar's name cleared, she knew a human court might convict him despite his having acted to save her life. *I will testify for you,* she signed.

If you do, the truth about our child will probably become public. It will be hard to hide once the lawyers start digging.

Jess bit her lip. *I know.* She doubted the news would be a complete surprise to either of their peoples. When the friendship between she and Ghar had become known, during the trial for the cartel, speculation had occurred.

Can you handle it? Ghar asked.

I think so. And you?

For myself I have no concern. But what of the child?

Jess finally spoke the conclusions she had come to after agonizing over that question for eight months. *Alejandra needs to know you as her father from*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

as young an age as possible. If we wait too long, fear could turn her from you. Better she knows from the start than to have the truth shock her later.

He lifted his hand in a Cephean gesture of assent. *I have thought this also. But the decision must be yours. She is a human child. You better than I know what she will deal with in human culture.*

I think it is best to tell her.

Then you will come to Earth?

Yes. We will come. It could only be for visits, if she meant to retain command of *Silver Tide,* but she and Alejandra would always find a way to see Ghar, somehow, whether or not he was in prison.

Ghar's large hands made word pictures as he signed. *I do not know if marriage between us is possible. But if not, I will legally acknowledge our daughter.*

Jess swallowed, unable to define the emotion within her. Ghar's life would be infinitely easier if he never tried to acknowledge his child. That he meant to anyway told her a great deal about him.

You honor us, she signed.

He moved his hands awkwardly. *I am unsure of the proper way to say this. Were you Cephean, I would know. But in human terms I am lost.*

I'm not sure what you mean.

His hands slowed. *Wherever you go, whatever you do, my heart walks in silence until you touch my hand.*

A hotness came to Jess's eyes. She recognized the verse; Cepheans used it as a declaration of love. Finally she recognized the unfamiliar emotion within her. She and Ghar had walked in silence, for years, afraid to voice what they felt to each other.

She signed the traditional Cephean words back to him. *I offer my heart to break your silence.*

They could never have what they wanted, a normal life. But perhaps they could bridge the fear that separated their peoples. It wasn't everything.

But it was a start. ■

Chat online
with your favorite authors!

Dreamer of Dune **March 11 @ 9:00 P.M. EST**
Brian Herbert on his biography of his father—Frank Herbert.

Greg Bear **March 25 @ 9:00 P.M. EST**
He will discuss his latest novel, *Darwin's Children.*

Meet Our Nebula Nominees **April 8 @ 9:00 P.M. EST**
Chat with the authors of our 2002 stories that make the final Nebula ballot.

Go to **www.scifi.com/chat** or link to the chats via our home page (**www.analogsf.com**). Chats are held in conjunction with *Asimov's* and the Sci-fi Channel and are moderated by *Asimov's* editor, Gardner Dozois.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

SCIENCE FACT

Isaac Was Right: N Equals One

Ben Bova

Where is everybody? We've made all kinds of excuses, but maybe the explanation is much simpler. . . .

It's time for serious science fiction enthusiasts to admit the obvious: there are no intelligent aliens out among the stars.

Despite more than four decades of radio searches for intelligent signals from the stars, no hint of an alien civilization has been found. The most likely reason is that there aren't any out there to be found.

Despite all the scholastic numerology in which the Drake equation has been played like a church organ, there are no other intelligent creatures in the Milky Way except us.

If $N = R^* f_p n_e f_l f_i f_c L$ is the question, then the answer is $N = 1$. We're it. The late and sadly missed Isaac Asimov was right. In his galaxy-spanning novels of the Foundation and intelligent robots, there are no intelligent aliens. And in the real Milky Way, there are none either.

Drake's famous equation was never meant to be holy writ. It was intended as a guide to thinking about the possibility of extraterrestrial civilizations. Since all the factors in the equation are unknowns[1], it can hardly be considered a reliable guide to anything except our own prejudices.

Freeman Dyson, of the Institute for Advanced Study at Princeton (and no stranger to unorthodox ideas himself), wrote: "I reject as worthless all attempts to calculate . . . the frequency of occurrence of intelligent life forms in the universe. Our ignorance of the chemical processes by which life arose on Earth makes such calculations meaningless."

But the situation is actually worse than that.

It's not merely the deafening silence from the stars that brings me to this sad conclusion. Admittedly, our radio tele-

[1] Even the value for the first factor, R^*, which represents the number of stars in the Milky Way, is debatable. Estimates have ranged from 100 to 400 billion.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

scopes have probed only a tiny fraction of the Milky Way.

The real problem is that underneath our search for extraterrestrial intelligence lies a basic assumption that today's biologists find highly questionable: the assumption that wherever life begins, it will eventually achieve intelligence, given enough time and the good luck to avoid total extinction.

That assumption, modern biologists strongly believe, is just plain wrong.

Hubris or Narcissism?

Yet science fiction writers continue churning out stories about intelligent extraterrestrials, alien civilizations, interstellar empires and interspecies wars. Meanwhile, very bright and dedicated scientists—including Frank Drake himself—continue to search the skies for intelligent signals.

Why? Are they guilty of hubris, the sin of overweening pride, believing that they *know* somebody's out there waiting for us to find them, despite the mounting evidence that it just isn't so?

No, I think the fault is narcissism: we look out at the stars and see our own reflection.

We have been the victims of that false assumption, an assumption buried so deeply in our psyches that we didn't even realize it was there, coloring our thinking, leading us onward like a siren toward the rocks of bitter disappointment.

We blithely assume that intelligence is the end-point of biological evolution. As a fundamental part of our world view, we firmly believe that we *Homo sapiens* are the most complex creatures on Earth, and our splendid intelligence is the secret of our success.

This leads us to assume that wherever life is found beyond Earth, intelligence will develop quite naturally, inevitably, unless some planet-shaking catastrophe interrupts the progression of local life forms from simple to constantly more complex.

We are aware that intelligence poses certain dangers, such as nuclear devastation or ecological collapse, but we believe that most (or at least some) intelligent species will be smart enough to avoid those traps and flourish into an interstellar civilization.

In the April 2002 issue of *Analog*, Robert Zubrin displayed this hidden, almost subconscious assumption:

"... the entire history of life on Earth shows clearly that, once life starts, it exhibits a continuous tendency toward development of greater complexity, activity, and intelligence."

Tell it to the bacteria, the most successful form of life on Earth (and probably elsewhere, as well). They've been chugging along since before our planet's crust cooled down, and those single-celled prokaryotes[2] outweigh all the other forms of life on Earth put together. Bigger life forms come and go, but the bacteria roll on forever.

Zubrin goes on, "In other words, based on everything we know, life and intelligence should be common in the universe."

Alas, he is wrong. We don't know any such thing. Life in the universe may indeed be as common as bacteria, but intelligence might just happen to be a fluke that happened here and nowhere else. Because it happened here, we naively assume it is an inevitable result of biological forces. 'Tain't so.

The late Harvard paleontologist Stephen Jay Gould pointed out that although life began on Earth nearly four billion years ago, multicellar life is only about 750 million years old, and intelligence (us) didn't come onto the scene until a scant few million years ago.

Considering that the Sun is about halfway through its stable life span of

[2] *Prokaryote* means the cells have no nucleus. The DNA is carried like a loosely raveled ball of string.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

roughly 10 billion years, Gould writes, "If a meandering process consumed half of all the available time to build such an adaptation (intelligence) even once, then mentality at the human level certainly doesn't seem to rank among the 'sure bets,' or even mild probabilities, of history."

In other words, the existence of life does not automatically lead to the existence of intelligence. Intelligence is most likely a survival trait that has been adapted by only one genus (*Homo*) of all the countless life forms that have inhabited this planet Earth over the past three-plus billion years. The odds against it happening on another world are, frankly, astronomical.

Where's the Evidence?

The modern search for extraterrestrial intelligence (SETI) began in 1959, when Drake arrived at the spanking-new National Radio Astronomy Observatory (NRAO) in Green Bank, West Virginia. A graduate of Cornell and Harvard, Drake had become intrigued with the possibilities of locating alien civilizations ever since he had been a student at Harvard and had detected a strong radio signal while observing the Pleiades star cluster. The signal turned out to be from a terrestrial source, but that sudden thrill of thinking that maybe, just maybe, he had found an extraterrestrial civilization was a turning point in Drake's life.

Few astronomers admitted even to thinking about alien intelligence in those "silent generation" days of the 1950s, but Drake was fortunate enough to hear a lecture by Otto Struve while he was at Cornell. Struve was an astronomer of impeccable international reputation, and the son of a world-famous astronomer, as well. Among his many interests in astronomy was the way that stars spin: Struve believed that slow-spinning stars must be accompanied by planetary systems that have absorbed the star's angular momentum, as the planets of our solar system have absorbed the Sun's angular momentum. At that time there was no clear evidence of planets orbiting other stars (that was not to come until 1995), but Struve maintained that stellar spin rates showed that other stars must have planets accompanying them. In those days, hardly any astronomers avowed an interest in whether other stars were accompanied by planets.

Struve became the first head of NRAO, and Drake joined his staff in West Virginia. Somewhat hesitantly, Drake suggested using the new 26-meter radio telescope to search for possible alien signals. Struve enthusiastically agreed with Drake, but, because the search for alien life was still a touchy subject in academia, and carried a large "giggle factor" among the politicians who decided on NRAO's funding, Drake's search was started in secret, "piggybacked" on a legitimate study of the 21-centimeter radiation.

Meanwhile, two highly-respected physicists from Cornell University, Giuseppe Cocconi and Philip Morrison, proposed using radio telescopes to search for intelligent signals from alien civilizations. Their landmark paper, "Searching for Interstellar Communications," was published in the British journal *Nature* in September 1959. It ended with the words:

"The presence of interstellar signals is entirely consistent with all we now know, and if signals are present the means of detecting them is now at hand. Few will deny the profound importance, practical and philosophical, which the detection of interstellar communications would have. We therefore feel that a discriminating search for signals deserves a considerable effort. The probability of success is difficult to estimate, but if we never search the chance of success is zero."

Drake calculated that his equipment could detect radio signals similar to those being broadcast around Earth out to a distance of little more than 10 light

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

years. He did not expect to find alien messages deliberately beamed toward us; he was hoping to detect the background chatter of a global civilization's radio and television broadcasts. He picked the two nearest solar-type stars to study: Epsilon Eridani and Tau Ceti, 10.7 and 11.3 light years distant, respectively. He dubbed his "bootlegged" program *Ozma*, after the queen of L. Frank Baum's fictional land of Oz, which, in Drake's words, is "a place very far away, difficult to reach, and populated by exotic beings."

The very first day (radio telescopes can operate in daylight), their first look at Epsilon Eridani produced a sharp signal that electrified Drake and his colleagues. But it turned out to be a false alarm: something nearby put out an electrical pulse that the radio telescope picked up. The search was not going to be that easy. Far from it.

Over the next four decades, more than a dozen radio searches probed the stars with ever-more-sophisticated equipment. NASA became involved, and turned the world's largest radio telescope, at Arecibo, Puerto Rico, and the Jet Propulsion Laboratory's Deep Space Network array of radio dishes at Goldstone, California, to the search for intelligence.

Aside from one "Wow!" signal that was picked up by an array at Ohio State University in 1977—a strong radio pulse that was never repeated and therefore could not be identified—no sign of intelligent communications has been found. There was a brief flurry of intense excitement in 1967, though, when very precise pulsed signals were detected by Jocelyn Bell and Antony Hewish in Britain, but despite a few weeks of wondering whether they had discovered "little green men," the astronomers found that they had stumbled onto a new type of stellar object, the pulsars.

SETI became an international affair, with the Russians devoting considerable effort to the search. Thinking about the difficulty of finding an individual star that might be broadcasting messages, Carl Sagan suggested that radio telescopes be turned to some of the nearby galaxies, such as M31, the great spiral in Andromeda, some two million light years distant. His reasoning was that by aiming at a whole galaxy, a single telescope could "see" hundreds of billions of stars. If there were any highly advanced civilizations among that host deliberately beaming out powerful messages, their signals might span the immense distance between us.

By 1974, Drake was a professor of astronomy at Cornell. Together with Sagan, who by then headed Cornell's Laboratory for Planetary Studies, he used the Arecibo telescope to beam a simple message at the globular star cluster M13, which contains more than 100,000 stars. British astronomer and Nobel laureate Sir Martin Ryle strongly objected, arguing that no signals should be sent out because they could show possibly hostile and dangerous aliens where we are. Sagan, who grew up reading science fiction, pointed out that since M13 is 25,000 light years away, even if there are evil aliens intent on conquest, they could not possibly trouble us for at least 50,000 years.

The Counter-Attack

Despite the bright hopes and hard work of the SETI researchers, dozens of radio telescope facilities working for more than four decades have found no repeated signals, no signs of intelligent life.

Politicians found SETI an easy target, and a good way to make headlines. In the 1970s, Senator William Proxmire of Wisconsin postured as a guardian of the taxpayer's purse by presenting a "Golden Fleece" award to government programs that he thought were wasting tax money. In 1978 he awarded a Golden Fleece to SETI, deriding the scientists who, his news release claimed, were

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

searching for "Martians."

By 1981, when the proposed NASA budget included two million dollars to support SETI (million, not billion) Proxmire led the campaign in the Senate to forbid NASA from spending *any* money on SETI.

Sagan visited Proxmire and, by showing that SETI efforts were leading to much more sophisticated electronic equipment, which would have an impact on many industries, he got Proxmire to back off somewhat. But the handwriting was on the wall. To the politicians, SETI's lack of results meant failure. Washington's interest in SETI shriveled like a pinpricked balloon.

Moreover, there was a scientific counter-attack against SETI going on.

"Where Is Everybody?"

In 1950, at lunch with fellow scientists at the Los Alamos National Laboratory, Nobel laureate Enrico Fermi asked a simple question: If there are intelligent extraterrestrials, where is everybody? Why haven't we seen evidence of them?

The obvious answer was that, if they exist, the distances between their worlds and ours are so vast that the only hope we have of finding evidence for them lies in radio searches. Hence SETI.

But by 1975, after some 15 years of radio searches, two scientists published papers that proposed something close to heresy, as far as the SETI researchers were concerned. American Michael Hart and David Viewing of Britain independently came to the conclusion that the reason no intelligent signals have been found is that there are no intelligent creatures out there. Planet Earth is so rare, they argued, that we should not expect to find a similar world, or intelligent life.

In 1980, Tulane University mathematician Frank Tipler joined the counter-attack. Tipler is not a hidebound conservative, nor a chalkdust-dry academic. His work has included ideas on how to build time machines. Yet he concluded that there are no other intelligent species in the entire universe.

The Milky Way galaxy is at least twice as old as our solar system, he pointed out. There are billions of stars that have existed for billions of years longer than we have. If intelligence has arisen on even a few of these ancient stars, those alien civilizations would be far older and far more knowledgeable than we. Their technological capabilities would immensely exceed our own.

Such a civilization would be able to colonize the entire galaxy, Tipler suggested. It need not send its own people into space; it could send self-replicating machines that move from one star to another, colonizing any planets they find and using those planets' natural resources to build more copies of themselves and move on to the next stars.[3] In effect, such machines would be like a virus spreading from star to star, planet to planet. If their spacecraft could achieve velocities of only 10% of the speed of light (something that we should be able to do before this century is out), they could spread exponentially across the entire Milky Way in just about a million years.

The fact that Earth has not been visited by these mechanical representatives of a superior civilization, Tipler concluded, is proof that no such civilizations exist.

Howls of protest greeted Tipler's pessimistic argument. The SETI optimists pointed out that his conclusions rest on enormous assumptions. For example: Could such ancient civilizations exist? The oldest stars are metal-poor; they might not have contained the proper elements for life, or for a technologically

[3] The idea of self-replicating machines, machines that make copies of themselves, was first proposed by the Hungarian-born mathematician John von Neumann in the late 1940s.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sophisticated civilization, to arise around them. Or, if such very old and wise civilizations do exist, perhaps they would have no interest in colonizing the galaxy.

By the year 2000, the various arguments against the existence of intelligent aliens were summarized by paleontologist Peter D. Ward and astronomer Donald Brownlee in their book, *Rare Earth*. Basically, they refined the idea that complex life (meaning multicelled organisms) is so rare in the universe that we may be the only example in the galaxy. While microbial life may flourish elsewhere, intelligent life might be unique to our special planet.

Is Intelligence Inevitable?

Moreover, biologists were awakening to the idea that intelligence is neither a necessary nor an inevitable consequence of life. Most of us still hold in our minds the concept of a Tree of Life (or perhaps a Ladder of Life) that starts with very simple organisms and culminates, at the top, with an intelligent species: *Homo sapiens*.

We tacitly assume that wherever life exists, intelligence will eventually arise, given enough time. But is that true? The modern biological view of Earth's life resembles a thick, wild bush more than a tree or a ladder. Intelligence is merely one evolutionary tactic, an adaptation that helps a species to survive, little different from developing a shaggy coat of fur, or sharp-focusing eyes, or wings or gills or any myriad of adaptations.

Life adapts in every way it can, and intelligence—which we regard as the high point of it all—is most likely just another adaptation that has helped our particular species to survive, but may eventually push us into extinction, as our weaponry or heedlessness exceeds our ability to control our passions.

The dinosaurs did very handsomely for nearly 200 million years without intelligence. The brainless bacteria have been around for nearly four billion years. In the entire history of Earth, only genus *Homo* has developed unquestioned intelligence, and only one member of that genus, *H. sapiens*, has avoided extinction—so far. What makes us think intelligence is so lofty?

Gould put it this way: "Humans [and intelligence] are here by the luck of the draw, not the inevitability of life's direction or evolution's mechanism."

In other words, it is not inevitable that there are other intelligent species out there to communicate with us. We may indeed be alone.

Congress Strikes Again

While scientists argued these points back and forth, the politicians in Washington acted on them. In 1992, Congress again forbade NASA from spending a penny on SETI. Proxmire was long gone from the Senate, but Senator Richard Bryan of Nevada echoed his sentiments:

"The Great Martian Chase has finally come to an end. As of today, millions have been spent and we have yet to bag a single little green fellow. Not a single Martian has said take me to your leader, and not a single flying saucer has applied for FAA approval."

Notwithstanding the fact that SETI had nothing to do with Mars or UFOs, NASA was prohibited from working on SETI.

Is Anybody Out There?

The hell of it is, those know-nothing politicians may be right.

Enthusiasts such as Zubrin may write, "Our galaxy is almost certainly currently inhabited by large numbers of starfaring species." But that is a statement of belief, not fact. It is based on that tacit assumption that life anywhere will inevitably lead to intelligence.

All the supporting arguments that Zubrin and Drake and Sagan and everyone else have used to "prove" the existence of extraterrestrial intelligence are nothing more than sheer numerology.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

They all rest on that assumption that intelligence is a natural culmination of life.

I don't mean to pick on Zubrin especially. He possesses a sharp, original mind, and his proposals for exploring Mars at a fraction of the "official" price NASA has hung on human missions to the red planet are wonderful examples of clear thinking and bold vision.

Yet when he writes about "Galactic Society," it seems to me that he is allowing his enthusiasm to run far ahead of the evidence.

"But if [intelligence] could have happened on Earth," Zubrin says, "then it could happen on other planets. And there are likely billions of other planets where it could have happened first, and therefore, in all probability, did."

See how the assumption colors the attitude? Zubrin goes on to draw up a table showing the probable numbers of extraterrestrial civilizations. Then he writes, "So even in most cases where the galaxy is only partially settled, the Earth should have drifted through somebody's interstellar empire at some time in its history."

Then he goes on to offer explanations for why there's no evidence of our being visited by these hypothetical extraterrestrial imperialists.

The simplest answer is that they don't exist. Occam's Razor can cut painfully through our most cherished dreams, but the simplest answer is usually the closest to the truth.

There are no interstellar empires. There are no intelligent extraterrestrials. There is very likely a lot of life out among the stars. The universe may very well be teeming with life. But the chances are overwhelming that it is primarily microbial. Even on worlds where multicelled creatures have evolved, intelligence is no more inevitable than any other trait a species might develop in its struggle for survival.

I wish it were otherwise. I wish Zubrin and all the other "pro-intelligence" thinkers were absolutely right, and we lived in a galaxy that abounds with intelligent species. But the evidence points against it.

Where does that leave us? With an enormous opportunity. And an enormous responsibility.

The human race can expand through interstellar space, unchallenged by alien and possibly hostile intelligent species. This places the stewardship of life squarely on our shoulders. We must revere life, wherever we find it. We must protect life while we expand our own habitat across the starry heavens.

For some day the galaxy will be filled with intelligent civilizations: the children of Earth. We owe it to our descendants to keep the living universe a fit place for them to grow in.

We should strive to make Isaac proud of us. ■

(This article was derived from Ben Bova's forthcoming book, The Living Universe.*)*

VISIT OUR WEBSITE
www.analogsf.com

Don't miss out on our lively forum, stimulating chats, controversial and informative articles, and classic stories.

Log on today!

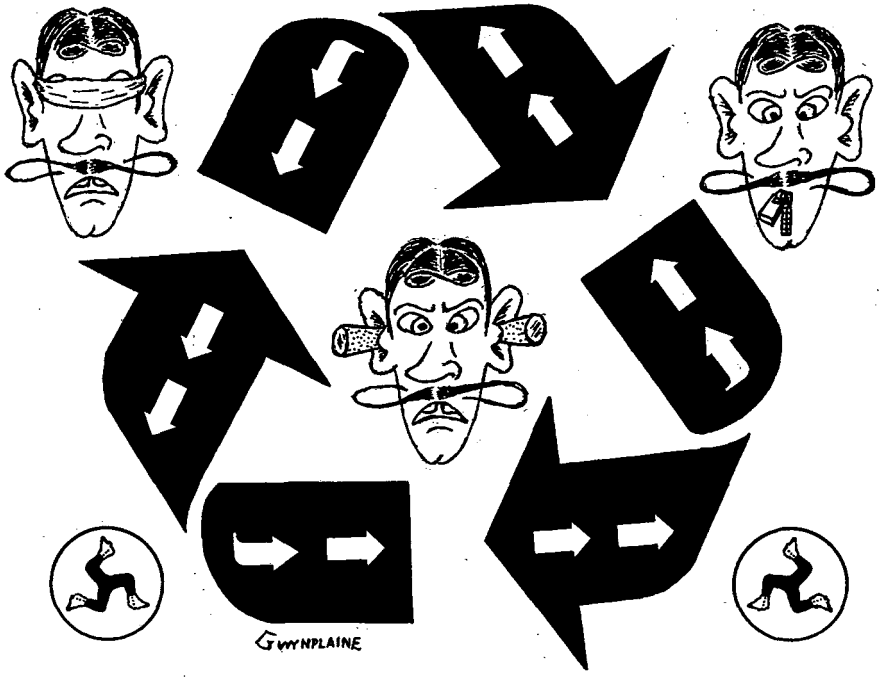
LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

A Deadly Medley of Smedley

F. Gwynplaine MacIntyre

Illustration by F. Gwynplaine MacIntyre

What could be worse than
one Smedley Faversham?



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

But here, upon this bank and shoal of Time,
we'd jump the life to come.
—Macbeth, Act I, scene vii

The river of Time has banks and shoals and backwaters, and its currents flow not always swift nor straight. The currents of Time must forever be patrolled by vigilant time-keepers. Thus it happens that, on one fateful occasion, the Paradox Patrol dispatched one of its chrono-cruiser gunboats to an especially turbulent lagoon along the banks of the river of Time. This particular chrono-cruiser was captained by none other than Julie Anne Callender, the most fearless time-cop in the multiverse. Ahead of her, racing against the current of the time-stream (at twice the speed limit, and without any turn signals) was some sort of fiendish submersible time-vessel, cleverly designed to travel through the time-currents without breaking the surface.

"Halt, in the name of the time-laws!" shouted chrono-constable Callender, activating her comlink and transmitting to the submarine on all known frequencies. "Whoever you are, it is my duty to inform you that you are under arrest. Anything you say will be taken down and used against you."

"Your panties!" jeered a voice through the comlink . . . a voice which sounded more than slightly familiar.

"Well, I know where I've heard *that* voice before," said Julie Anne Callender. "We meet again, Smedley Faversham. I don't normally hear your voice broadcasting from a submarine, but this just proves you're *sub*-normal."

"I'll handle the puns around here, Julie my gendarme," said the voice of Smedley Faversham over the comlink. Amid the background noise of his transmission, two other voices seemed to chortle in agreement with Smedley's taunts.

"Who've you got in that sub with you?" Callender demanded. "Hostages?"

"Evil henchmen," said Smedley Faversham's voice on the comlink, and the chortles seemed to chuckle exponentially. Just then, Smedley's time-sub picked up speed, and Officer Callender had to gun the engines of her chrono-cruiser in order to keep up with him. *"Of course, this is a very small submarine,"* Smedley went on, *"so I've only got room for two henchmen in here. For a job requiring* four *henchmen, I would have left my submarine at home and sailed here aboard my galleon. I usually get four cohorts to the galleon."*

"I'm ordering you to stop," Julie Anne Callender warned him, guiding the helm of her time-vessel with one hand while using her other hand to hold her nose until the stench from that last pun had safely dispersed. "Come to a dead halt in Space and in Time. Reduce your submarine's space-time trajectory to zero."

"This submarine is fresh out of zeros," said Smedley Faversham. *"That's why I've named it the* Naughtless."

"Shall I let him have it?" asked Julie Anne's brother, Gregorian Callender, the intrepid Paradox Patrolman, who was on duty at the weapons station while his sister guided the helm. Their chrono-cruiser was equipped with an enviable arsenal of weapons, including tachyon torpedos, baryon bombs, and some of that really stinky French cheese.

"Not yet," said Julie Anne Callender to her brother. "I've learned how to deal with Smedley Faversham: we can't outgun him and we can't outrun him, so we'll have to out-*pun* him. And besides, when the time comes to blast Smedley Faversham into subatomic particles, I plan to pull the trigger myself. Let me see if I can talk some sense into him." By now the warp drive of the chrono-cruiser was straining to the breaking point, so she had to raise her voice above the throbbing of the antimatter core. "All right, Faversham, I just know you're up to something illegal. Why not save time and tell me what it is?"

"Look around you," came his taunt-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ing voice in reply, while the chortles of his cohorts became smugger every instant. *"This is a narrow tributary of the river of Time. The riverbanks are very close to us, yes? Well, I plan to rob those banks."*

Julie Anne Callender cringed while her brother made sure that the weapons were on-line. "Robbing the *banks*, eh? That's a really lame piece of wordplay, Smedley. Even for *you*."

"I'm quite serious, cop-lady." There appeared to be something wrong with the comlink, because Smedley seemed to be speaking with three different voices in unison, while his submarine and the Paradox Patrol's chrono-cruiser hurtled along at top speed. *"Time is affected by gravity, and gravity is a function of mass, yes? My two henchmen and I plan to help ourselves to some of the dark matter at the edges of the time-stream's event horizon—the riverbanks at the borders of Time—and then we plan to redistribute that matter elsewhere, in parallel universes of our own choosing. We'll be able to modulate the flow of Time to suit our own purposes."*

"Then it's my duty to stop you," said Julie Anne Callender, straining her chrono-ship to the absolute limits.

"Captain! We cannae hold her much longerrr!" brogued a voice from belowdecks. The deckplates beneath Julie Anne's goddess-like feet abruptly altered the refractive index of their molecules to become transparent, and through the floor she saw the engine room below. The stout red-faced form of her uncle Newgate Callender—a senior officer of the Paradox Patrol—was hunched over the antimatter core, frantically shoveling quarks into the reactor pile with both of his hamhock-like hands while one of his feet (very definitely *not* goddess-like) barely managed to keep the safety valve pressed down. "The engine will overload at any moment!" Newgate bellowed. "She's gang tae blaw, an' I canna' gi'e her any more powerrrr . . ."

"Then let's wrap this up quickly, so I don't have to hear any more bad dialects." Julie Anne activated the comlink again. "This is your last warning, Faversham. You're under arrest, and so are your henchlings. Lower your periscope, release your ballast, and prepare to surface."

"You can't make me surface," came Smedley Faversham's voice across the comlink transmission, while his periscope twinkled with glee. *"I don't want to surface, and there's no way you can make me. There's no weapon in the world, no power in the universe, no scientific principle in all the laws of interdimensional physics which can make me bring this submarine to the surface of the time-stream until I'm darned good and ready. Until then, I won't surface."*

"Then you leave me no choice," vowed Julie Anne Callender. "I'll have to deploy Heisenberg's Un-Surfacey Principle."

There was a deep groan from the other end of the comlink, and a pause, then Smedley Faversham spoke: *"Okay, I surrender. That last pun of yours just used up all the oxygen in here. I'm coming up for air."*

"What's that on the chrono-sonar?" asked Gregorian Callender.

Julie Anne Callender looked up. A gigantic object had breached the surface of the time-stream directly in the path of Smedley's oncoming submarine. Julie gripped the helm, desperately trying to change course, but her time-ship was hurtling straight towards the massive unknown object. It appeared to be some sort of huge sea-monster, the size and shape of a whale, but Julie couldn't perceive the creature's precise nature. The leviathan's internal organs seemed to be located on the outside of its body, co-existing with its epidermis as if the creature's outsides and its insides were all one continuous surface. But what sort of a cetacean could . . .

"It's Möbius Dick, the one-sided

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

whale!" screeched Newgate Callender, as the hull plates breached and the torrents of the time-stream came flooding into the ship. The Paradox Patrol's chrono-cruiser pitched, rolled and yawed through the raging time currents. Something struck Julie's head, and she was aware of her brother Gregorian grabbing her by the waist and pulling her towards the escape hatch. A few moments later, gasping for air, Julie Anne found herself and her brother and their uncle Newgate—safe and sound, but somewhat dampened—on the shoals of the time-stream, gasping for air. Nearby, run aground and severely battered, was the submarine *Naughtless*. All of its hatches were still battened down. (One hatch had lost its batten, and was therefore buttoned.)

Julie Anne Callender unholstered her blaster pistol and aimed it at the submarine's escape hatch. "Come out with your hands up, Smedley, and bring your henchlings with you."

"I'm coming out," said a muffled voice from within the submarine, although some acoustic trick of the hull plating made it seem to Julie Anne as if three identical voices were speaking in unison. The hatch of the submarine was knurled and knarled with intersecting diagonal lines—it was a cross-hatch—but now those lines rotated clockwise as the hatch unscrewed and three figures of identical height and build stepped out.

Julie Anne Callender gasped. So did Gregorian Callender. Their uncle Newgate Callender did not gasp, but that was probably because he was dislodging some seaweed from his epiglottis. Judging from the expression of astonishment on his face, Newgate looked as if he wanted to gasp too.

The first man coming out of the submarine was Smedley Faversham, the interdimensional time-smuggler. Julie Anne recognized his mauve and fuchsia houndstooth suit and his argyle cummerbund: Smedley Faversham's distinctive ensemble, which was unique (fortunately) in all the known multiverse. Julie Anne Callender also recognized Smedley Faversham's distinctive hairstyle: his two forelocks looped in opposite directions like a sidelong figure-eight to form the sign of Infinity, twirled clockwise. And the two handlebars of Smedley's mustache looped in a complementary arrangement to form another sign of Infinity, twirled *counter*-clockwise. Anybody who has seen Smedley Faversham's face on a Wanted poster (or on an Unwanted poster) will know exactly what this looks like.

But it was the two hench-figures directly behind Smedley Faversham who made the Paradox Patrol officers gasp. (Except for Newgate, who, as previously mentioned, was choking on some seaweed.) The henchman standing behind Smedley Faversham's right shoulder looked almost identical to Smedley. But the slanted checkerwork pattern of his houndstooth coat was oriented at a different angle, as were the stripes of his argyle cummerbund. His forelocks and his mustache formed sideways figure-eights like Smedley's, but in this case they both were twirled clockwise. Meanwhile, the henchman standing behind Smedley's *left* shoulder was the mirror image of this man: his houndstooths and argyles angled in the opposite direction, and his mustache and forelocks were twirled counter-clockwise.

Seemingly three specimens of the same human template, but with varying spins.

The three Paradox Patrol officers all stared at the three criminals, and everybody made gubbling noises. Julie Anne Callender was the first one to reach for her handcuffs, and she was also the first one who spoke:

"I see what we've got here," she said, looking at the three counterpart Smedley Faversham. "This is a deadly medley of Smedley! Well, whoever you are, you're all under arrest. You're coming back with us to Paradox Central, to get

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

this mystery untangled."

"Untangled, did you say?" said Smedley Faversham (the real one). "That's what *you* think." And behind him, his two cohorts chuckled: *"Heh heh heh . . ."*

An instant later (and a brief hop across the vast multi-dimensional expanse of the entire time-space continuum), Smedley Faversham found himself in an interrogation room at the central booking station of the Paradox Patrol. He was seated across a table from Patrolwoman Julie Anne Callender. Smedley looked around the room, but there was no sign of his two lookalikes, nor was there any sign of Julie Anne's brother or uncle. "It's just you and me here, Faversham," she told him. "I've separated you from your minions. My forensics squad has run a bio-check on those two buddies of yours, Faversham. Their DNA is an exact match for your own, which suggests that you've had yourself cloned. But their fingerprints are an exact match for yours too, which can't be explained genetically: fingerprint patterns are part of an individual's phenotype, not the genotype. Even if the three of you were triplets, you couldn't possibly all have the same fingerprints . . . but you *do*. As far as I can tell, there's only one significant difference between the three of you: one of those guys is left-handed, the other one's right-handed . . . and I know from previous experience, Smedley, that you're ambidextrous."

"Leave my sex life out of this," said Smedley Faversham. "The fact is, from now on you can't charge me with any time-crimes. No matter how many witnesses swear they saw me commit the crime, no matter how much evidence you've got against me, I can always swear I was a million parsecs away from the scene of the crime, and it was two other guys who did the dirty work . . . guys who look like me, with my genome." Smedley Faversham smiled contentedly. "It's nice to know I have a permanent alibi."

"It's a *lousy* alibi," said Julie Anne Callender. "It's full of holes."

"Au contraire," said Smedley Faversham. "My alibi is smooth and white and flawless and unyielding. I have an alabaster alibi."

"Your alibi's not alabaster, buster," said Callender, checking her truncheon for structural flaws to make sure it would stand up to heavy abuse.

"Let's get to the point, shall we?" said Smedley. "You don't dare lock up three different versions of me, because all three of me have the same DNA and the same fingerprints. As soon as you admit that those traits aren't unique, then the court system would have to throw out all the previous convictions based on DNA or fingerprints. Even if you lock up *two* of me and let the third version of me go free, you'd still have to book two criminals with identical fingerprints and DNA. Your only option is to lock up *one* of us, but you'd have to let the other two go . . . and if you can't decide *which* one of three identical criminals to charge, then you'll have to release all three of us. So, Julie my gendarme, unless you can pull some brilliant scheme out of midair—which is *my* department—it looks like at least two out of three Fershams, and probably all three, will be walking out of here, chuckling freely. All three of me go free, you see? *Hee-hee!"*

"Whatever." Patrolwoman Callender brushed her hair away from her eyes and glared at her nemesis. "I frankly admit I'm baffled. Make it easy on yourself, Faversham, and tell me what the deal is between you and those two not-quite identical henchlings of yours."

Smedley arched one eyebrow. "I'm the original," he said. "And those other two are the extra crispy."

Officer Callender lifted her truncheon. *"You'll* be extra crispy in a second . . ."

"Okay, okay," said Smedley hastily. "I'll tell you who everybody is. To start with, I'm *me*."

"You're such a liar, I can't believe that

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

statement," said Julie Anne. "On the other hand, if you're lying when you tell me you're *you*, then you must be somebody else . . . which means you're not Smedley Faversham, the biggest liar in all known dimensions of space-time. So, either you're not Smedley Faversham—which, by definition, means you must be somebody *less dishonest* than Smedley Faversham, since he occupies the outermost waveband on the baloney spectrum—or else you actually *are* Smedley Faversham, which means I'm forced to concede that for once you're actually telling the truth. Sounds logical so far. Now, keep talking. If you're *you*, then who are those other two guys?"

"They're me too, but they're a couple of me from two parallel universes," Smedley Faversham explained. "Of course, parallel universes don't normally converge, but I've bent the time-space continuum out of shape so often that all three of me just naturally collided. We colluded and collided. Anyway, both of those other two guys are the exact moral equivalent of *me*, if such a thing is possible. One of them is my colleague and counterpart Stedley Maverscam, from the universe next door to us on our immediate left, and the other one is my counterpart and colleague Redley Scaverspam, from the universe next door on the right."

"Which is which?" Julie asked.

"Damned if I know," said Smedley, shrugging. "They look alike, they walk alike, at times they even . . ." Patrolwoman Callender hefted her truncheon again, and Smedley changed the subject quickly: "Look, I could easily straighten this out if my two buddies and I were all here together to explain this to you."

"Not a chance," said Julie Anne. "My brother Gregorian has got one of your twins in another interrogation room, and my uncle Newgate is holed up with the other one. We're going to keep the three of you separate until one of you squeals on the other two."

"Then you'll be here a while, so we might as well get comfortable," said Smedley, reaching into his cummerbund and producing a transparent packet of small brightly-colored objects that appeared to be breath mints. "Care for some?"

"What are those?"

"I made these mints myself," said Smedley Faversham "They're freshly minted. They're breath mints for time-travelers. I call them Tick Tocks."

"Why would a time-traveler need breath mints?" Julie Anne Callender inquired. "And I've got a feeling I'm going to be sorry I asked."

"I'm a time-thief, remember?" said Smedley Faversham. "I steal things from the future and sell them in the past, and vice versa. Well, these breath mints are *past-steals*. Here, have one." Smedley Faversham spilled a few mints across the tabletop and carefully separated four of these, each of them a different color. "I've got four different flavors of mints: peppermint, spearmint, wintergreen and prosciutto."

"Prosciutto's not a mint. It's a meat," said Julie Anne Callender.

"It's a *mints-meat*," said Smedley Faversham, as Patrolwoman Callender reached over to pick up the peppermint. But as she lifted it off the tabletop, she discovered that she had picked up the spearmint instead. Frowning, she put down the spearmint and reached for the peppermint again . . . but this time, as she picked it up, she discovered that now she was holding the wintergreen. Starting to discover a pattern here, Callender put down the wintergreen and reached for the prosciutto . . . expecting that this would magically transmogrify into the peppermint. Sure enough, she was holding the wintergreen again. "What the hell kind of mints have you got here, Faversham?" she asked.

"They're *entangle mints*," said Smedley Faversham. "All four of them are entangled on the quantum level, so they can't be separated . . . even though they exist in different quantum superposi-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tions. Look, I'll show you." Smedley Faversham took the prosciutto-flavored mint, and slid it across the tabletop towards Julie Anne. "I'll just move this one over *here* . . ." Instantly, unguided by any human agency, the peppermint and spearmint and wintergreen pastilles followed their meat-flavored sibling across the tabletop.

"I can smell a pun coming," said chrono-constable Callender. "Let me guess: one of the mints is prosciutto-flavored, so all four of them have to *meat*."

"Not at all," said Smedley Faversham. "The molecules in the prosciutto-flavored breath mint are moving at a faster velocity than the molecules in the other three breath mints, thereby raising the prosciutto molecules' energy level and increasing their heat. So I merely move one of the mints, and the other three follow *in hot prosciutto*."

Patrolwoman Callender turned out the lights, and the next few minutes were devoted to a time-dilation experiment. Eventually she put down the fragments of her truncheon, and Smedley Faversham stopped moaning. Officer Callender switched on the lights again as she produced a small electronic device and placed it on the table in front of Smedley Faversham. The device had a digital readout panel which was currently displaying the number **000**.

"This is a lie detector, Faversham," she told him. "I'm going to interrogate you . . . and every time you lie to me, my little friend here is going to get very angry."

Smedley stared at the lie detector as if it might bite him. "My dear inquisitrix," he said to Julie Anne, with wounded dignity. "I assure you that I have never told a lie in my life."

The readout panel changed to **001**.

"In fact," Smedley Faversham went on, "I wouldn't even *think* of lying to a police officer."

The readout panel changed to **002**.

"I'm going to need a bigger lie detector," said Julie Anne Callender, removing the small electronic device and substituting a much larger version of the same device, with a readout panel displaying a much longer row of zeros. "Okay, let's start again."

Smedley Faversham took a long look at this new lie detector. "What happens if I tell a half-truth?" he asked. "Will the readout say **0.5**?"

"No; it's a quantum lie detector, so it only recognizes quantum states of reality," Julie Anne Callender explained. "Every possible statement is either true or false; there's no state between quantum levels of truth."

Smedley Faversham nodded approvingly. "I've always been in favor," he said, "of a clear distinction between truth and falsehood."

As soon as he said this, the numbers on the lie detector began changing so rapidly they became a dim blur.

Patrolwoman Callender sighed heavily and reset the lie detector to zero. "Look, Faversham, the Paradox Patrol is convinced that you and your two henchbuddies have committed enough time-crimes to get locked up for several millennia . . . *if* we can build a case against all three of you. We haven't got enough evidence yet. But if we lock up three criminals with triplicate DNA and identical fingerprints, it would set an awkward precedent. So we're willing to cut a deal."

"I thought so," chuckled Smedley Faversham, shifting forward in his seat and adjusting his cummerbund. "And that deal is. . . ?"

"I'm questioning you in this room, while my brother and my uncle are questioning your two quantum counterparts in two other rooms," said Julie Anne Callender. "We'll let *one* of you go, providing he spills his guts and squeals on the other two. The other two, of course, will go to jail for the next several eons. Glaciers will form in the Arctic, slide across the face of the Earth all the way to the Antarctic, then melt, then reform, then move back to the Arctic be-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

fore two of you three guys ever see daylight again. But the one who talks first will be free as a bird."

"Quite so, quite so," said Smedley Faversham. "Well, in that case, I'll be quite happy to tell you everything I know about the nefarious activities of my two quantum counterparts, before they do likewise and tell you everything about *me*. To start with, they . . . *wait a minute*."

"Yes?" asked Julie Anne Callender innocently.

"I just realized," said Smedley Faversham. "If I squeal on my two quantum counterparts, there's a strong possibility that one or both of my counterparts will squeal on me reciprocally. There's nothing worse than a reciprocal squeal. Stedley Maverscam and Redley Scaverspam are my exact moral equivalents, so I can't trust either one of those two dirty bastards. If *all three of us* inform on each other, then you can lock us *all* up and there's no reason for the chronoprosecutor's office to give anybody a deal . . . so my two quantum companions and I will all be taking a one-way trip to the interdimensional hoosegow."

"La-dee-dah . . . " said Julie Anne Callender, humming idly to herself. *"La-dah-dee . . ."*

The forelocks on Smedley Faversham's fevered brow began quivering rapidly as he contemplated his dilemma. "If I keep silent, and my quantum cohorts keep silent too, then you'll have to let all three of us go free for lack of evidence. But if I decide independently to keep silent, there's no guarantee that one or both of my cohorts won't spill the interdimensional beans and inform against *me*. So that means Redley or Stedley will go free, but I'll be spending the next ten million years trying not to drop the soap."

"Yum-tee-tyum . . . " said Julie Anne Callender, admiring her reflection in the surface of the quantum lie detector. *"Yum-tah-tyee . . ."*

"And you could be *lying* to me," said Smedley Faversham. Now his mustache was quivering at the same frequency as his forelocks, presenting an interesting study in harmonics. "You said that the first one who talks will go free, but maybe the first one who confesses is the one who gets locked up. So should I give you truthful information in the hope I get an honest deal, or should I lie to you to sabotage your investigation?"

"Hmm-tah-tyee . . . " hummed Julie Anne Callender.

"This is serious," said Smedley Faversham, his cummerbund unwinding as his complexion became a delicate shade of paisley. He grabbed a handful of Tick Tocks from his package of entangle mints, and swallowed them nervously. But the mints in his digestive tract were entangled with the uneaten mints in the package, so they promptly reappeared in the same place he'd taken them from, while Smedley considered his options: "I have to choose between two quantum states of either spilling my guts or anti-spilling my guts. But in order to make the best decision for my own interests, I have to know the quantum positions of my two counterparts. Will Redley and Stedley squeal on me or not? Stedley will probably keep silent steadily, but Redley will rat on me readily. Or is it Stedley readily and Redley steadily? And if two of us tell lies, only the one who lies *first* will walk out of here. You'll make the later liar loiter, and the latter needs a lawyer. But if all three parallel versions of me tell the truth . . ."

"Think it over, Faversham," said Patrolwoman Callender, patting her prisoner on his shoulder while she got up to leave the room. "When you're ready to talk, be sure to speak into the lie detector. I'll be downstairs in the Doughnut Room, monitoring your progress."

"I've got all the time in the universe," said Smedley Faversham casually. He popped a Tick Tock breath mint into his mouth and leaned back in his chair. As Julie Anne Callender left the room, Smedley Faversham was singing a jaunty

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ditty:

"Aleph-null bottles of beer on the wall,
Aleph-null bottles of beer . . .
If one of those bottles
should happen to fall,
Aleph-null bottles of beer on the wall . . ."

"How's it coming?" Julie Anne asked her brother and her uncle. The two male chrono-constables had already made themselves comfortable in chairs along one wall of the toroid-shaped room which served as a lounge for off-duty officers at Paradox Central.

Newgate Callender nodded towards an instrument console on the wall, covered with buttons and knobs and three digital readout panels. All three readouts remained steadily at **000**. "See for yourself," said Newgate sullenly. "So far, none of our three guests has told any lies."

Julie Anne stared at her uncle. "What happened to that hoot-mon-laddie Highland accent of yours?"

"I scotched it," said Newgate Callender. "The accent's only funny when I'm in the engine room. Anyway, all three Favershams are talking a mile a minute—as usual—but the quantum indicators haven't changed yet, so we haven't caught any of them telling a lie."

Gregorian Callender nodded gloomily. "As soon as any *one* of the readouts changes, that means one of the three Favershams has started lying . . . so he's probably trying to clear himself by incriminating one or both of the others. When that happens, we can be sure that whoever lies first is more guilty than the other two . . . and we'll know which one to come down on, *hard*." Gregorian smacked his fist into his other hand, and glared at all three readouts. "Come on, one of you liars. Don't just lie there: *lie!*"

"I can hardly believe that three different versions of Smedley Faversham are all talking at once, and none of them are lying," said Julie Anne Callender. "This strains belief to the breaking point and beyond. I think I'll just monitor a monologue at random, and see what they're talking about." She pressed a button on the console.

A vidscreen monitor lit up, showing Smedley Faversham alone in the interrogation room, talking into the quantum lie detector. "I had a tragic childhood," he whimpered. "My mother and father never had any time for me, because they were busy in the iron and steel business. My mother did the ironing, and my father did the stealing. Every day, I had to walk twelve miles to school and back again, uphill both ways." A small wormhole opened in midair near Smedley Faversham's face, and an onion emerged from the wormhole. The onion levitated itself, intersecting the event horizon of the wormhole, which neatly cut the onion into several thin slices. Meanwhile, from some unseen dimension, tremulous violin music throbbed sobbingly and sobbed throbbingly. A teardrop trickled down Smedley Faversham's right cheek. "When I was growing up—*sniff! sniff!*—I had no toys at all, except for my sled. I really loved that sled. I named it Nosebud." Another teardrop trickled down Smedley's right cheek, scurrying after the first one. "One day my father came home—*sniff! snaff!*—and he took away Nosebud. He sold Nosebud to pay off his gambling debts. *Sniff-snurf!*" By now, a torrent of teardrops was flooding down Smedley's right cheek, but his left cheek remained steadily un-tearstained. As if to rectify this error, several tears on his right cheek slid across the bridge of his nose and scuttled down his left cheek. "My parents had no time for me, so I decided—*sniff-snaff-snarf!*—to steal all the time for myself. I would become the biggest time-criminal in the universe. That way I could travel yesterwards and change the past, so I could alter my own childhood . . ."

"I've heard enough of this," said Julie Anne Callender, switching channels on the vidscreen. "Let's see if Smedley's quantum counterparts are doing any

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

better."

The man on the vidscreen now was either Stedley Maverscam or Redley Scaverspam, and he too was bemoaning his fate: "Before I turned crooked, I tried so hard to earn an honest living in the corporate world," he whimpered. "I tried to negotiate a merger between Xerox and Wurlitzer, to form a company that would make reproductive organs." His tears came trickling in torrents.

Patrolwoman Callender snarled, and flicked the channel again. Now the man on the vidscreen was either Redley Scaverspam or Stedley Maverscam, and he too was bewailing his misfortune: "I tried to earn an honest living in the transportation business," he wailed. "I tried to negotiate a corporate merger between the Cunard shipping line and Aer Lingus, but the deal fell apart when we couldn't agree on the company's new name . . ."

"All three of them have been whining like that for an hour now, wallowing in self-pity," said Gregorian to his sister, as she angrily switched off the monitor and tore the vidscreen out of the wall. "Three quantum counterparts from parallel universes, and all three of them competing to see which one had the lousiest childhood."

"They'll have to crack eventually," said Julie Anne. "This is an old paradox called the Prisoners' Dilemma. None of the three prisoners can control his own fate unless he knows the actions of the other two. They can only achieve optimum results by working towards a mutual objective. But since all three are isolated, each one will act in his own self-interest . . . not only dooming the other two, but also dooming himself."

"Well, so far it hasn't worked yet," said Newgate Callender, his walrus mustache twitching expectantly as he reached for a doughnut. All three of the digital readouts were still steadily locked onto zero. Suddenly, one of the displays clicked to **001**.

"Jackpot!" said Julie Anne. "Which one is it?"

Her brother Gregorian consulted the display. "Redley Scaverspam lied first," he said excitedly. "That means Redley is trying to save his own neck by lying about Stedley and Smedley. Which means that Redley Scaverspam is probably the ringleader, and the other two are small fry. Redley thinks we'll cut a deal, but *he's* the one we're going to hang the charges on. Let's go!"

At that instant, the display reading **001** suddenly clicked back to **000**, and the readout alongside it—which had stayed steadily at zero—now lurched forward to display **001**. "That's impossible!" said Newgate Callender, his walrus mustache quivering. "Redley Scaverspam has somehow nullified his own lie! Now the readouts show that Stedley Maverscam is the one who's lying about Smedley and Redley."

"Can the numbers on the counters move downwards if someone tells the truth to retract a previous lie?" Julie Anne Callender asked.

Newgate shook his head. "No. Every true statement leaves the lie detectors unaltered. Each quantum falsehood moves the readout *one* number upwards to the next quantum level of falsehood, but not even an infinite number of true statements can counteract a single lie. The numbers can't diminish unless we manually reset the counters."

Something was definitely wrong. As Julie Anne watched, *one* of the readout displays whizzed dizzily into the upper magnitudes, registering several dozen lies a second. At the same time, another digital readout which had already logged several hundred falsehoods was now steadily whizzing *downwards*, rendering itself paradoxically more truthful with each passing nanosecond. The third readout, contrarily, was fluctuating rapidly between **000** and a random sequence of high numbers, alternating between quantum states of total truthfulness and high amounts of falsity.

"This is impossible!" said Gregorian

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Callender. "Anyone can stop telling lies—even Smedley Faversham, I guess—but they're always stuck with all the lies they've previously told. Every person starts out honest, in a zero-state of lying. But as soon as anyone makes the quantum leap from zero lies to the first level of falsehood, there's no way they can reverse the process and decrease the number of lies they've already told."

"Jumping gravitons!" yelled Julie Anne. "The breath mints! The entangled mints! I see it now: Smedley Faversham and his two henchmen are *entangled on the quantum level!* The Prisoners' Dilemma is nullified, because the three prisoners aren't isolated. The action of each version of Smedley Faversham affects the quantum superposition of the other two Smedleys!"

"I see what you mean," said Gregorian, studying the three digital readouts. "One of the Smedleys is telling the truth, another one is lying non-stop, and the third one is somehow occupying a quantum superposition between half-false and half-true. But that just isn't possible!"

"Well, it's happening," said Newgate Callender. "Somehow, those three hoodlums have redefined the borders between truth and falsehood. If we don't stop them, they'll trigger some kind of liars' entropy effect!"

Julie Anne Callender turned pale. "You don't mean to say . . . thermo-*lie*-namics? The breakdown of all distinctions between what's true and untrue?"

Newgate Callender nodded grimly. "The heat death of the *true-niverse*. All falsehood will be equally distributed throughout all the dimensions of space-time, rendering all statements equally false and all life-forms equally dishonest. Smedley Faversham's dishonesty has finally attained criminal mass, and it's about to consume the whole universe. We should probably do something to stop this."

"Well, there's three of us and three of them!" said Gregorian Callender, who had always been good at arithmetic. "Come on! Let's each choose a Faversham, and we'll stop them!"

Thus, a moment later, Julie Anne Callender had rushed back to the interrogation room containing Smedley Faversham—the original version, not one of the quantum extra-crispies—and as she opened the door, she saw an astonishing sight. Her brother Gregorian and her uncle Newgate, in two other interrogation rooms, were probably witnessing something similar.

Smedley Faversham was standing in the middle of the room, and yet he wasn't. Parts of his body appeared to be fading out of sight, then returning again, while other portions of him vanished. Sometimes only an external portion of his body faded, leaving his internal portions clearly on display until his epidermis returned.

"This wasn't supposed to happen, Faversham!" said Patrolwoman Callender angrily. "You were just supposed to make a clean confession, and spill your guts into the lie detector!"

"Ah, but you see, my dear," said Smedley casually. "All the quantum bits of my body are entangled with those of my other counterparts in parallel dimensions, and therefore I couldn't possibly act independently without affecting the quantum states of all the infinite number of Smedley Faversham. As for spilling my *guts* . . . well, take a look."

Julie Anne Callender looked, although her instincts told her to avert her gaze. At this moment, the outer portions of Smedley Faversham's lower torso had vanished, offering Julie Anne a convenient (or perhaps not so convenient) view of his internal organs . . . specifically, his intestines. Instead of a neatly coiled digestive tract consisting of Smedley's colon, semi-colon, and apostrophes, Julie Anne discovered that Smedley Faversham's intestines were a winding labyrinth of tesseractile tissue, twisting and convoluting into and out of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

conventional space-time and disappearing into otherwhere dimensions, then returning.

"It's not just on the quantum level, you see," Smedley Faversham announced off the top of his head . . . literally, because all the portions of him between his nose and his neck had temporarily vanished. "All of my bones and vital organs are physically entangled with the counterpart portions of my quantum equivalent Smedleys in parallel space-time dimensions, and most of them are bigger crooks than I am. I never knew I could be parallel and crooked both at once. Since I'm intestinally entangled with an infinite number of my criminal counterparts, I can't very well spill *my* guts without spilling all of *theirs*, too . . . and it could get rather messy. But in all the infinite arrays of Smedley Favershams, my two friends Stedley and Redley and I are the only three of the infinite us who happen to be in jail at the moment . . . so we're going to blow this joint, and re-corporeate ourselves amongst our entangled brethren elsewhere in space-time. You might say we're going to lose ourselves in a crowd."

By now, more and more pieces of Smedley Faversham were vanishing for longer intervals, and it was clear that he was fading away on the installment plan. Julie Anne Callender's brother and uncle had joined her in the doorway of the interrogation room as she asked the fading felon Faversham one more question: "But where will you go, Smedley? How will you live, if your individuality is tangled into an infinite number of parallel crooks?"

"I'll be all around in the quarks," said Smedley Faversham's tonsils in midair as the rest of his face vanished into the void. *"Any place there's a cheap thug stealing candy from a baby, I'll be there. Any place where a crooked landlord is evicting widows and orphans, I'll be there. Any place where there's a cop beating up a guy, and a crowd gathers to watch, and there's a chance for somebody to steal all their wallets while nobody's looking, I'll be there. Wherever there's a window in space-time just waiting to be jimmied open, or a null-universe where I can hide some stolen property, or a tachyon to be taken, or a crime just waiting to be committed anywhere in the vast void of villainy, I'll be there. See you around, Julie Anne . . ."*

And then the last remnants of Smedley Faversham vanished.

Julie Anne Callender felt a shiver run up her spine. "I guess there's just no stopping Smedley Faversham, anywhere in Time or Space. He's achieved infinity."

A shrill cackle of glee, from the fading point of singularity in midair directly in front of her, was the only reply that came . . . followed by a thud, and then a groan. "What was that?" asked Newgate Callender.

"I tripped over some dark matter," said Smedley Faversham's voice from elsewhere. *"I guess I didn't see it coming."* Then he was gone again . . . but only for the moment.

"And now I know how to stop him," Julie Anne vowed to her brother and her uncle. "If there's anything in the universe which is vaster and more infinite than Smedley Faversham's dishonesty, it's Smedley Faversham's incompetence. If he's everywhere and everywhen at once, he's sure to trip over himself. And I'll be there to nab him."

"Are you sure?" Gregorian Callender asked. "The universe is pretty big. There's an infinite number of space-time dimensions for Smedley Faversham to hide in."

Julie Anne nodded determinedly, and now her brother and uncle saw that she was holding a small transparent packet of objects that looked like breath mints. "Depend on it," Patrolwoman Callender vowed. "I'll find him, whatever it takes. I'll search every quark, top to bottom. Smedley Faversham doesn't know the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

meaning of the term *entanglement*. Somehow, somewhere, somewhen, he's going to tangle with *me*."

"You sound pretty certain," Gregorian said.

Julie Anne nodded again, as she shook a single Tick Tock entangle mint out of the packet: she had wanted the peppermint, and therefore she had selected the wintergreen, so now of course it was the spearmint. She raised the mint to her goddess-like lips, and at once the spearmint Tick Tock had shifted superpositions and become the prosciutto. As she swallowed this, Julie Anne Callender detected a definite flavor of peppermint. In a universe of random chaos, sometimes you get what you actually want.

"It takes two to tangle," said Julie Anne Callender of the Paradox Patrol. "And someday Smedley Faversham and I will entangle again." She raised high the packet of Tick Tocks. "It's his fate. It's his destiny. It was *mint* to be."

From somewhere, beyond the void, came the sound of an infinite number of groans . . . ■

MOVING?

Please send both your old and new address (and include both zip codes) to our subscription department:

ANALOG
P.O. Box 54027
Boulder, CO 80322-4027

or fill out the change-of-address form on our website:

www.analogsf.com

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

RECENT AND WORTHY

This month's Alternate View was supposed to be the second part of the column I started in the February issue. However, "LENR Part 2" will just have to wait until the web-site, a new "clearinghouse" for information about Low Energy Nuclear Reactions, to which I plan to introduce my readers in that column, recovers from a few circumstances-beyond-their-control. (The problems aren't serious—just some major pain-in-the-butt difficulties—and soon to be solved. But I felt it prudent to wait until I could actually access the fully up-and-running site before I wrote a column directing any of you there.)

Fortunately, I am never at a loss for topics, the reason being that I, like most of you, read a lot. For instance, I just finished a book called *Conquest by Man* by Paul Herrmann. It is a marvelous tome from 1954 dealing with voyages to new lands made by explorers long before Columbus. Any one of the fascinating and well-researched chapters in this book would make for an interesting column (and subsequently, pay back many times the price of the book, which I found purely by luck at the local library used book sale for only two bucks!). However, it's out of print.

Having finished *Conquest by Man*, I'm now working my way through the 1950 Dover hardcover edition of Oliver Heaviside's *Electromagnetic Theory*. (This special edition is three volumes in one book, with—ack!—very small print.) Every page of this book is packed with brilliance but, once again, 'tis out of print.

Now, far be it from me to let a little thing like current unavailability prevent me from calling your attention to a worthy book. Didn't I do that very thing with *Thrust Into Space* (July/August, 2002)?

But I have read a great many more recent and yet worthy books, still easily available. Any one of them would be worth a column (as was *The Versatile Soliton,* presented in my October 2002 column, "The Wave of the Future"). But I can't, and furthermore, don't want to, write a column about all of them. So this time around I'll introduce you to a few of these "recent and worthy" books that I think you owe it to yourselves to check out. Some of them may yet find their way into future columns, but in case they don't. . . .

First up are two books by Richard Rudgley, *Secrets of the Stone Age* (ISBN 0-7126-84522, 2000) and *The Lost Civilizations of the Stone Age* (ISBN 0-684-85580-1, 1999). Both books deal with the evidence for significant technological abilities and advanced social structures (that is, civilization) of our ancestors during the last ice age. No, these books are not of the *Chariots of the Gods* strain—far from it. Indeed, one might best describe them as the *antidote* to the viewpoint of such books. As Rudgley says in the introduction to *The Lost Civilizations of the Stone Age*, "Such views are extremely popular and influential, and this is partly due to pub-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

lic dissatisfaction with the standard academic view that does not explain the origins of civilisation in a convincing way." (p. 12) The author's remedy is to (also p. 12) "show that the cultural elements that constitute civilisation did exist in the Stone Age and that the civilisations of ancient Egypt and other ancient societies had their prehistoric precedents." Rudgley takes the reader on a trip through time that starts in ancient Egypt and heads backward into the mist of prehistory. He assembles the puzzle of prehistoric civilization from a tool or article of clothing here, and a cave painting or a small sculpture there. It's a trip anyone who reads SF is sure to enjoy.

Both books deal with essentially the same subject matter. The latter book is the more scholarly of the two—richer in material, more thorough in its treatment, heavily referenced with a sizable bibliography—and so for me, the more satisfying. But the former book is the "dumbed-down, coffee table edition," and what it lacks in content it makes up for in beautiful color photographs (the photos of cave paintings are breathtaking!).

Next up is *A Different Approach to Cosmology* by Fred Hoyle, Geoffrey Burbidge, and Jayant V. Narlikar (ISBN 0-521-66223-0, 2000). Different from what? Different from the Big Bang, of course. It was Fred Hoyle who first referred to earlier versions of the current standard view of cosmology as the "big bang model." Hoyle remained skeptical of the Big Bang until his death in August of 2001, and this book serves as his final say on the matter.

And what a thorough "say" it is.

I have been skeptical of the Big Bang model since the early 80s, when Cosmic Inflation was coming to be accepted. The notion that problems with the Big Bang could somehow be fixed by having the (*really*) early Universe briefly inflate at many times the speed of light left me cold. The idea did not strike me as brilliant, but rather, as desperate. It still does.

But who is going to listen to me complain about the Big Bang? No one, and that's why it's a pleasure for me to recommend a book like *A Different Approach to Cosmology*, written by men who have been active in the field. And in Hoyle's case, by a man who has worked in the field from its very beginning.

The authors wisely chose to use a historical account of how cosmology has progressed from its "true beginning" in 1914, to the present. This way, one sees clearly how the current Big Bang model grew out of earlier ideas and the need to make sense out of the accumulation of astronomical observations made possible by the explosion of new technologies in the post-war era. But one also sees how the authors' own quasi-steady-state model organizes and interprets this same body of observations. The Big Bang is then properly seen as one of several competing models and not, as it is usually portrayed, as the only possible answer.

So what is their alternative to the Big Bang? Little bangs that go on all the time, creating matter continuously out of "space-time," rather than in only one huge explosion at the very beginning. In this model, active galactic nuclei are the very engines of creation, rather than huge black holes sucking up matter and torturing it into titanic explosions.

Whether you agree with them or not, *A Different Approach to Cosmology* is a valuable resource written by a trio of the learned and loyal opposition to the standard view.

Finally, we come to a pair of exceptionally important books by Oleg D. Jefimenko[1], *Causality, Electromagnetic Induction, and Gravitation*, 2nd Edition (ISBN 0-917406-22-2, 2000) and *Retardation and Relativity*, (ISBN 0-917406-21-4, 1997). I must warn you that, while the Rudgley books and the Hoyle *et. al.*

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

book are, for the most part, readily accessible to the typical educated layman, these Jefimenko books are not. They are heavily mathematical. However, even if you are a hopeless math-incompetent, you can still understand the gist of the books just by reading the words and skipping the equations.

I expect that most of you readers have never heard of Oleg Jefimenko, but in Classical Electromagnetism circles he is well regarded, even having a couple of equations named after him. For the past few decades, Jefimenko has devoted himself to the study of electromagnetic retardation. As the author admits, this is an obscure concept. His own description of what it is can be found in the preface to *Retardation and Relativity*: "Electric and magnetic fields propagate with finite velocity. Therefore there always is a time delay before a change in electromagnetic conditions initiated at a point in space can produce an effect at any other point in space. This time delay is called electromagnetic retardation." (p. v)

Some of you are no doubt thinking that this is common knowledge to any typical educated layman, and you're right. But, for the most part, the equations of Classical Electromagnetism are not usually expressed in a form that explicitly takes this fact into account. When you *do* cast the equations in their retarded forms, which is precisely what Jefimenko does in these two volumes, some interesting results appear.

As Jefimenko says (this from p. vi of the same preface—see above): "Perhaps the most important recently discovered aspect of the now evolving theory of electromagnetic retardation is that this theory leads to, and duplicates, many electromagnetic relations that are customarily considered to constitute consequences of relativistic electrodynamics." In other words, the equations Einstein showed could be derived via the postulates of special relativity (the equal validity of all physical laws in all inertial frames and the constancy of the speed of light in all inertial frames) can also be derived simply by incorporating the empirical fact of electromagnetic retardation into all analyses, without recourse to any postulates at all.

One thing that everyone knows about from special relativity theory is time dilation: that time slows down for fast-moving objects. This conclusion is so easy to derive from Einstein's postulates via a bit of geometry and algebra that I once showed my tenth-grade geometry students how to do it (one of them was genuinely interested). In Chapter 10 of *Retardation and Relativity*, Jefimenko shows how applying the theory of electromagnetic retardation also yields time dilation.

Jefimenko's approach is to "construct" an electromechanical system that could function as a simple clock, and then show how the retarded equations predict that the clock slows down when put in motion. As an example of a primitive clock, picture a positively and uniformly charged ring with a small (much smaller than the ring radius) negatively charged sphere constrained to move on the ring axis. When displaced just a bit from the ring center, the sphere will oscillate along the axis in simple harmonic motion, and this periodic motion allows us to use the system for a clock. When this clock moves, say in the direction of the ring axis, the electromagnetic retardation equations show how the forces on the sphere change with increasing velocity, increasing the period of oscillation. Increasing it, in fact, by exactly the amount predicted by special relativity.[2]

However, electromagnetic retardation shows that it is also possible to construct some simple clocks that slow down *at a different rate* than that predicted by special relativity. Indeed, the same clock can behave in accordance with, or not in accordance with, special relativity, depending only upon its orientation to the direction of motion.

This is a huge contradiction with spe-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cial relativity, which says that the magnitude of time dilation depends only upon the relative velocity between two observers.

So which theory is right? Special relativity has served us very well. But the techniques of electromagnetic retardation are so fundamental that to question them is to question the very foundation of physics and its mathematical methods.

Alas, I must stop at this point—I'm out of column space. But fear not, I will in the future be discussing more of Jefimenko's work. I'm just trying to figure out if I should do it in the Alternate View or if I should instead write it up as an *Analog* fact article.

While you wait, I've suggested some books you can read. And I still have to write "LENR Part 2." ■

---

[1] http://www.as.wvu.edu/coll03/phys/www/jefimenk.htm

[2] If you want the details but don't want to buy the books, see Oleg D. Jefimenko, "Direct Calculation of Time Dilation," *American Journal of Physics*, 64, 812-814 (June 1996).

IN TIMES TO COME

Not long ago I mentioned that the old cliché "the mad scientist" may be acquiring a new sort of relevance in the real world. Steven Bratman's novella "The Immortality Plague" offers a good case in point, and a good illustration that the "madness" need not be particularly severe or clinical to be dangerous—and that what people want may not suit them at all when they actually get it. Our May issue will offer quite a range of stories, from that to Don D'Ammassa's deliciously (no pun intended) satirical short story "A Good Offense." In between those extremes we have Ken Wharton's "The Monopole Affair," a tale of cutting-edge research and political intrigue, as well as a new Draco Tavern story by Larry Niven and something for the season by John C. Bodin and Ron Collins. What season, you may ask? Well, read the issue and find out!

Richard A. Lovett offers the fact article on "The Search for Extraterrestrial Oceans." Yes, they do appear to be out there, and our own oceans offer some clues as to where they might be and what they might be like—which turns out to be very, very different from the homegrown variety.

And, of course, we'll have the Conclusion of Rajnar Vajra's unique novel, *Shootout at the Nokai Corral*.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Emma

Kyle Kirkland

Illustration by Sherlock

As the old saying goes, be careful what you ask for. You may get it!

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Emma Krath was born in 1960. She married in 1983, and sternly but fairly helped to raise four children as well as nine grandchildren; she lost her husband after thirty-eight years of marriage. She was an educator and briefly served in public office during the horrible epidemic of 2021. She passed away in her sleep in 2053 and was buried, according to her wishes, in a small plot in her hometown.

Emma had not prepared for what happened next.

The young man staring at her had wild eyes. Otherwise, he was unremarkable, with medium-length brown hair and a smoothly shaven face. "Emma," he said, again and again, in a voice that was steady but couldn't quite mask an overtone of great excitement.

"Hello?" ventured Emma. She looked about her. She was lying in bed in a small, featureless room. Several monitors seemed to float about her. The man was standing nearby.

"Where's Kathy?" asked Emma. She distinctly remembered that she'd been hospitalized, and her eldest daughter was an almost constant visitor. "She was here just a moment ago."

The man took a deep breath. "I'm going to be perfectly straight with you, Emma. Kathy's dead. She died many years ago."

Emma stared.

"My name is Mitchell, but call me Mitch. Or just M. That's what they started calling me at the institute."

Emma studied the man for a moment. He smiled pleasantly and waited patiently. He was well groomed but dressed oddly, wearing a dark suit and cowboy boots, which reminded Emma of something her grandfather would have worn—and something her son wouldn't have been caught dead in.

"Clothing styles come and go in cycles, Emma."

Startled, Emma leaned forward. "How did you—"

Mitch laughed. "Pretty easy to read you on that one. Pretty easy to know you've got lots of questions. I've got lots of answers. First question is, what are you doing here? Right?"

Emma nodded uneasily.

Mitch laughed again. "Answer's easy. You're going to solve all of our problems!"

Mitch's office was on the top floor of a ten-story building. He seemed, in fact, to have the whole floor all to himself. That in itself would have told of his importance. But Emma had also noticed how other people at the research center treated Mitch: mostly with awe and a certain degree of subservience that made her uncomfortable.

The office was green, a lush garden full of plants and vines that slithered up the carefully sculpted walls and framed the small water fountain in the center. Wood chips and gravel covered the floor. Emma sat on a cushioned bench by the window. The ceiling was obscured by thick boughs, which suggested a dense covering of forest—except for the spots of unconcealed tiling that seemed to harbor delicate pieces of equipment.

The view outside was a breathtaking vista of continuous urban landscape. But from her high vantage point, Emma noticed a few pockets of deterioration, including one blackened structure that had obviously been burned and gutted.

She also saw her reflection in the glass. Her looks were the same as she remembered, although her memory was hazy—she hadn't been in the habit of looking at herself a lot as she'd gotten older. But Emma was basically the same elderly woman pictured in her old videos and photographs. She quickly looked away. If they *had* to bring me back, she thought, couldn't they have made me young again?

Mitch was sitting at his desk; it was shaped in the form of a felled tree with a graded surface and chiseled shelves and drawers.

She turned to face him. "You say I'm

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

legally a person under the current laws, that I have all the rights and responsibilities that everyone else has. You keep saying I'm Emma. But Emma's long gone. You say that you've replicated Emma from all of those records or something. Well, I can't know that! All I know is what you tell me—and what's inside my head right now. Maybe my memories aren't even real!"

"Would that matter to you?" Mitch's face grew serious, but there was still a suggestion of a smile in those wild eyes. "Maybe it would. But they *are* real. It's simple. You were reconstructed from a ton of records, Emma. More data than you'd ever want to know about—medical records, school records, DNA, psych profiles, career decisions, records of your family and friends and what they said and wrote about you, your teaching, as well as everything you've ever written or recorded. All of your decisions, as many as were known, were scrutinized in their proper context—both what you did and what you didn't do, for any given situation. And business records too. You'd be surprised how much information corporations keep on their potential customers, even back in your day."

"All of this sounds rather nosy, Mitch."

"Nosy of me or of corporations?" Mitch laughed. "Guess it doesn't matter. Yes, it bothers me a bit too. But look at what it let me do! There's so much data on everyone—including you, Emma—that before quantum computers, there would have been no way I could have implemented my algorithms. They would have taken centuries to run!"

"So you know much of what happened in my life. And from these algorithms, you found out how I used to think." Emma looked at him doubtfully.

"It's true, Emma. I swear it. Look. All you need is enough constraints. The brain has its modus operandi, like everything else. It works slightly differently for each person and that's why we need all that data. But once you've got the data, it's easy."

Emma raised her eyebrows. Mitch used the word "easy" entirely too often.

"Once you've got the data, it's nothing but physics and computation. The data gives you the boundary values, and if you know the equations of motion, it's easy to find the solution. I'll give you an example. Think of a drumhead. Now if you know the boundary conditions—easy for a drumhead, since it's tied down all around—and if you know the properties of the material, then you know everything you need to know in order to solve the equations. Hit the drum with any stimulus and you can predict how it'll move in response. Now listen, Emma. Not too long ago, we discovered the equations for the brain. They're not deterministic, they're stochastic and based on probabilities—but that's okay, they work fine on average. And your data gave me the properties and boundary conditions of . . . well, you. Your brain. It's more complicated than a drum, but the idea's the same. You see?"

Emma frowned. "So that's what I'm doing with my mind now? Solving equations?"

Mitch made a fist. "Emma, it's *no different* from what's going on in my mind! Or anyone else's. In fact, your brain right now is all biological, grown from programmed neural stem cells. You're not immortal; you've only got a few decades at most, I'm afraid. Does it *feel* any different to you?"

"How should I know? I don't know how it felt before—except for a memory I'm not sure I trust. And don't get your dander up, young man. I'm only asking."

"And I'm only answering," Mitch laughed. "Tell you what. Read up on all these things in our library." He waved a hand in the air. From a similar gesture he'd made earlier, Emma had noticed that he was able to summon a technician with the movement, though she didn't know how it worked. "Read up on everything and anything you want. Besides, the conference is in two weeks

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and you need to be ready."

Mitch had told Emma that she was to participate in a conference, the details of which were not yet divulged to her. "You could at least tell me," said Emma, "why *I* was the one you chose to . . . to . . . *resurrect*."

"I knew there would be adjustments that you'd have to make," said Mitch, frowning. His expression, Emma noted, could go from one extreme to another almost instantly. "But I didn't realize they would trouble you so."

"I'm not so much troubled as curious."

"But I don't want to tell you *everything*. I don't want to tell you about my theory." Mitch frowned again, more deeply this time, and ran his fingers through his hair. "Guess it doesn't matter. You'll just read up on it anyway, and I don't want to censor your info terminal."

"This conference. It's political, isn't it? It's some sort of attempt to head off a war, correct?" Emma waited for Mitch to nod. "That's my point. While I have some small amount of experience in politics, it's hardly significant compared to what you want done here. If it's a negotiator you needed, why in the blue blazes didn't you pick someone more qualified? Surely there were better candidates than I!"

"It wasn't a negotiator we originally wanted—but I'll get to that later. And you're leaving out the question of data. For instance, I couldn't resurrect, as you put it, Abraham Lincoln. Not enough data on him."

"Okay, then. Somebody more recent. Even with that constraint, you've got a large number of choices."

"Sure. But listen. That's my theory: within reasonable limits, no one is the best choice—everyone's pretty much equal!"

Emma looked at him blankly. Mitch's eyes grew fiery again, and Emma ever so slightly drew back.

"No, no, no! Emma, I'm right on this, I tell you. And I'm not crazy! Listen to me, would you? How they pressured me to choose someone famous! But that's nonsense. All the well-known politicians of history, all the well-known generals, artists, and heroes; do you know who they were? Ordinary people, for the most part. They became famous—they went down in the history books as 'great'—simply because they were in the right place at the right time. Okay, maybe they had above-average skills, but not so great as they're made out to be."

"How about the great scientists of history?" Emma paused, carefully choosing her words. "And the famous scientists of today?"

Mitch laughed. "Same. Including me." He made a fist and smacked it into his palm. "There's nothing all that special about me, and that's what first led me to be a real believer in this theory. I'm not the first one to come up with the idea, by the way. But I might be the most famous advocate! And I know it's true. Consider my career: I know deep in my soul that I'm not as smart as some people make me out to be. No one can be *that* smart. I know full well that I am where I am now because one: I work hard and make the most of what talent I've got, and two: I got the breaks. You don't know what sacrifices my father made, so that I could have time and tutors for all of my studies in school. And in my career, everything has gone my way: my first project was an amazing success—mostly by luck! I capitalized on that luck and I'll take credit for that, but I can't take credit for all of my . . . well, phenomenal success."

"I think you underestimate yourself."

"And I think not. But you're not the only one who disagrees with me." Mitch grinned. "And you wouldn't believe the fuss over you. My choice of you, I mean. It cost I-don't-know-how-many trillions of dollars and when I was asked to head up the project, instead of selecting some famous person, I let a computer decide—choosing randomly from a large list of names I supplied."

"Trillions of dollars," repeated Emma.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"And I won the lottery. I suppose a dollar isn't worth as much now as it was in my day, but that's still a lot of money. I guess that's why I'm the only one so far."

"You guess right. But don't think that you were specially chosen for this conference. You weren't—it wasn't a consideration. The conference wasn't even scheduled when this project first began. Project Born Again had other goals. All we wanted to do was perfect the technology, to do a proof-of-principle experiment: you. *I* was the one who *later* came up with the idea of having you attend the conference."

"I see. But why—"

"To show that my theory is true!" shouted Mitch. "Why else?" He leaned forward and stared straight at Emma. "Who would you say is a reasonable choice to negotiate a peace settlement between two belligerent parties?"

"I'd say someone with the necessary experience."

"Exactly!" Mitch clapped his hands. "And who has more experience than a person who's raised four children and nine grandchildren?"

Despite herself, Emma smiled. "I can't say that I fault your reasoning. But still, you could have chosen someone besides me. In an ideal world, I suppose, we'd all be equal—but this isn't an ideal world. Some people are going to be better at certain tasks than others."

"No argument there. I admit it: we're not all *perfectly* equal. Anybody can see that's false. But studies indicate that with personalized training and instruction which matches an individual's needs, test scores are fairly even. Not exactly even, but pretty close. Not everyone agrees with me—in fact, the majority of people don't—but all I'm saying is that given the right training and motivation, individual differences in abilities are mostly inconsequential."

"It sounds to me like you're saying that if everything were equal, we'd all be equal. Which would certainly be true—if everything were equal. But it isn't!"

"You sound like some of the people I argue with—like the ones who didn't agree with my choice for Project Born Again." Mitch shrugged. "But I generally get my way, Emma. Modesty aside, I'm sort of popular with the tax-paying public: they consider me a genius because of all my scientific success. Being considered a 'genius,' false though it may be, has its advantages. It's why I call all the shots on Project Born Again, as well as other projects."

"And so here I am, to do a job I'm not altogether qualified for."

"Wrong! Remember, you weren't chosen specifically for the conference. That came later. But anyway, you *are* qualified, whether you think so or not. You've always had excellent negotiating skills. And I should know—I know almost as much about you as you do!"

A technician walked in and Mitch glanced at her. "Anlyn," he said, "take Emma down to the library and show her how to use the machines—the search engines, the archives, and anything else she wants to look at." He turned to Emma again. "There are even more reasons why you're the logical choice, which we can go into later, maybe. But I'm not sure I want to say any more about it right now. Besides, you won't be the only one there at the conference, you know. And no one will be expecting much from you—except me."

"This way, Ms. Krath," said Anlyn.

Emma stood up. She hesitated, drawing stares from both Mitch and the technician. The lines in her face deepened. "Quite honestly, I'm not sure I can face it. You have to realize that everybody I ever knew is now dead. I'm not comfortable with this whole situation. I still have a lot of questions. And the history in those archives . . . I lived part of it. It's *my* history."

Mitch rose. "I understand. I'm putting a lot of pressure on you, bringing you along a lot sooner than I probably should. Please believe that it's for a good reason. You'll find that out if you read the archives. This

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

war, if it should happen, will cost more lives than you can imagine."

"I doubt it," said Emma. "I have a pretty good imagination." The epidemic of 2021 left an indelible mark on everyone who survived, and Emma recalled losing her husband and a twenty-eight-year-old daughter, as well as dozens of other relatives and friends. Later, after finding herself elected to a local public office, she lost thousands of constituents, a loss she felt as deeply as if they were family.

"Sorry, I had forgotten," said Mitch. "I suppose you do."

"All I can do is try my best," said Emma.

Anlyn smiled and took Emma's arm. "We'll chat for a little while, then I'll show you how to operate the machines. You can look at as much or as little as you like."

The library was marvelous.

Most of the devices were gaze-activated. A huge screen microscopically displayed the contents of an entire book or volume, but sensors tracked the observer's eye movements and magnified the center of gaze. Text and graphics could be moved around with the eyes and a few voice commands, so that large data sets could be sorted and collated "by eye" and presented on a single screen.

Emma quickly learned the history of the conflict between Earth and its colonies: a tale of expansion followed by increasing tension as the distance melted the bond between colony and parent world. But there seemed to be more to it than that—it wasn't that simple. The more Emma read about the looming conflict, the less she understood it.

She tried to frame it in terms of the usual motives: independence, economics, territoriality, ideology. The trouble was, she couldn't make heads or tails out of the arguments and counter-arguments. She could read the words, yes, but she could not fathom the *meaning*. She read and reread the articles of the existing (and tenuous) truce, but she understood very little of what appeared to be convoluted and unintelligible legalese, drafted by lawyers and ambassadors. The articles, she realized, were going to be a major issue at the conference; her failure to make any sense out of them would ruin all hope she had of contributing something useful to the discussion.

Besides reading about the conflict, she amused herself by tracing some of her descendents. Her pleasant diversion didn't last long, however. Eventually she traced a descendent who had emigrated to one of the colonies—in this case, a lunar colony. And this forcibly brought her mind back to the impending war: the colonies were the enemy.

Well, not *her* enemy. But Earth's.

So what exactly were they fighting about?

Despairing of ever figuring it out on her own, Emma asked Anlyn to take her upstairs to see Mitch. Perhaps he could shed some light.

Anlyn was reluctant. "Mitch is always so busy," she explained. "And he likes to be alone. Perhaps I can answer your questions."

"I'm sure you can," said Emma. "But I do really need to talk to Mitch, too." She pressed, delicately but firmly; she knew Anlyn would eventually yield. Even in the little time that she'd known her, Emma judged the young technician as a good person, friendly and trustworthy.

Mitch, on the other hand . . . Emma was undecided.

They took the lift to Mitch's floor and Anlyn disappeared for a moment. When she came back she looked slightly flustered, but ushered Emma in. Then Anlyn disappeared.

Emma made her way through the jungle. Mitch was too engrossed in his work to even look up.

Quickly Emma summarized her problem.

"No, no, *no*!" shouted Mitch.

Reflexively Emma shrank back.

"A thousand times no!" Mitch glanced up, eyes blazing. "I'm not going to tell you anything. Don't you see? I don't

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

want to bias you. That's part of the whole problem. Why do you think no one can solve it? Why do you think I don't even *try*? Because I'm so partial to one side. There's no neutrality here, and that's always the sticking point. No neutrality but you, and that's one of the reasons why you have a good chance to find the answers."

"But I don't even understand the questions!"

"Emma," said Mitch coldly, "are you trying to make a fool out of me?"

Emma took a deep breath. "No, I am not. I am trying to tell you that I feel like an antique. I feel like a Jurassic mammal who suddenly materialized in the modern era and wondered where in the world all the dinosaurs went."

"That is precisely why I directed you to our library and our complete archives—which contain material from both sides of the dispute, as well as everything else, modern and old. What's the problem?"

"The problem is that I'm centuries out of date. I don't understand your philosophies, your goals, your behaviors. I'm not even certain I understand your language."

"I'm still confused. You have several weeks to learn."

Emma paused. Two weeks would probably be enough for Mitch. More like two *years* would be the norm for everyone else. Yet with his theory of "intellectual homogeneity," he couldn't see that other people might be much slower to learn than he. Emma saw little recourse. "Then perhaps I'd better get back to it," she said, resigned.

"Emma, wait." Mitch got up and stepped over to Emma. "I'm sorry. I'm probably making mistakes here. Don't forget, I'm new at this sort of thing too."

"I understand." Emma smiled. "But I don't suppose there's time to resurrect anyone else. I don't know when we have to leave for the conference—"

"You won't be going anywhere. It's a teleconference, Emma. Neither side could agree on which planet or satellite to hold the conference. Not a good sign, is it? But don't worry, you'll still be able to observe the participants in real time, body language and all. I'll vouch for our virtual reality equipment—it's top-notch."

"But if your technology is so good, surely you can do another resurrection. How about one of the great Nobel Peace Prize winners of the recent past? You're bound to find enough data on any one of them."

Mitch shook his head. "My theory says that, within certain limits, it's not important who we get. You're relatively impartial, that's all that matters. You don't need to be some wizard of a negotiator! Besides, we're just not that fast with these techniques yet, even with quantum computers and automatic programming of the neural precursors. We may *never* be very fast. We're talking about a lot of money and a lot of time to repeat the experiment. You'll be the only one we do for quite a while, Emma."

There were twenty-five people at the conference, seated strategically, according to strict protocol, around an oval table. Twelve representatives from Terra, twelve from the colonies, and one Emma Krath, observer.

No one spoke for a lengthy period of time in the beginning, the silence being an accepted part of the protocol. Emma stayed quiet as well. In fact, she only spoke four times during the whole meeting.

The first time was immediately following a Terran representative's heated reply to a Colonial. He used the phrase "submissively querulous."

"What," said Emma, "does 'submissively querulous' mean?"

There were uneasy but polite smiles as the representative explained the psychological concept that held that feelings of inferiority were always accompanied by feelings of anger.

There were fewer polite smiles the second time that Emma interrupted. "By

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

'bounded infinity,'" replied a Colonial representative curtly, "I mean an economic necessity by which the goods and services of one sector are limitlessly expandable but only at the expense of other sectors."

"You see," said a Terran, "that's where we disagree. . . ."

The third time there were no polite smiles at all. "The 'Clause of Instigation' simply refers to provocative language."

"Like a dirty name, you mean," said Emma.

The fourth time there wasn't even an answer. That's because no one could agree on what the term actually meant.

Mitch was ecstatic. "They decided to talk again!" he yelled. "Success!" He looked at Emma and Anlyn, both of whom were standing in his office. His smile slowly faded as he took in their serious expressions.

"Emma," said Mitch, struggling to regain his enthusiasm, "I don't expect you to realize what a breakthrough this is, but I would have thought *you* would know, Anlyn. None of these conferences have ever been followed by anything but nasty exchanges and military skirmishes. This is the first time they've agreed to talk again so soon afterwards. It's a real step forward. Maybe a small step, but a step nevertheless. And my theory was right!"

"Shall I tell him?" asked Anlyn, glancing at Emma.

"Perhaps you should let me," replied Emma.

"Wait a minute," said Mitch. He glanced back and forth at Emma and Anlyn. "Tell me what?" Searching Emma's somber look, Mitch leaped over to her in a single bound and grabbed her wrists. "Emma, you can't be serious! If you're thinking what I think you are—"

"Hold on," said Anlyn. She gently pushed Mitch back. "Let her have her say."

"Actually, Mitch, maybe there's more to your theory than I first realized," said Emma. "Then again, maybe there isn't. I wasn't at the conference."

Mitch looked dumbfounded.

"It occurred to me," continued Emma, "that if I couldn't understand what the big argument was, maybe nobody else could either. My idea was that the reason they were arguing so much is that they actually weren't even communicating—they simply saw their own feelings and biases reflected in the language and ideas of the other side."

"A perfect corollary to my theory," said Mitch, grinning. "You realized that no one was really smarter than you."

"But theories aren't so perfect. It was theories and abstract concepts that got everybody in trouble in the first place, particularly when they weren't carefully explained or applied."

"Well, from now on our diplomats will probably be more careful, thanks to you. And my theory has been supported, if not confirmed." Mitch folded his arms and smiled.

"I disagree," said Emma. "And another thing: I'm also not sure that you had any right to bring me back."

Mitch's supremely expressive eyes narrowed just a bit.

"It wasn't me, by the way, who actually helped this conference along," continued Emma. "As I said, I wasn't even there. It was an AI, simulated over the virtual reality link."

"Nonsense." Mitch smirked. "You don't have the expertise to build an AI." The smirk faded as he glanced at Anlyn.

"It was rather easy," said Anlyn. "All we had to do is write a program that understood only a basic level of language, and interrupted whenever it heard a term it didn't comprehend. It only took a half day's work, and most of that was getting Emma's image down right."

"But what was the point?"

"The point was that all it took was *just* a very simple AI," said Emma. "When the higher-ups learn about that—"

"I get it! They'll flip. I can see the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

headlines now. 'Conference representatives praise observer for breakthrough—discover it was a very simple AI.' If that doesn't show them that they're being ridiculous—and that this dispute is equally ridiculous—nothing will."

"And that, I hope," said Emma, "will be the beginning of the end of it. Maybe they'll start really talking to each other now, using language and ideas that everyone on both sides can understand. Of course, they might be a tad angry, too. But maybe voters will begin to realize that they have some pretty big fools for representatives—in which case there'll probably be some changes come next election. I hate to say it, but every once in a while politicians can be pretty darn incompetent. And when that happens, disasters have a way of showing up."

Mitch hugged Emma and Anlyn in turn. "Fantastic. Now if you'll both excuse me, I have work to do." He gazed at Emma. "You *are* planning on sticking around, aren't you? You've done good work here, whether you agree with my theory or not. And I see that you've already made a friend out of Anlyn, and more are sure to come. You're not alone, Emma."

"I'm afraid that I'm very much alone here. And that's what I'd like to talk to you about."

"Anlyn is a good person to talk to," said Mitch. He sat down and activated the graphics viewer at his desk. "I've got a bunch of work—"

"You certainly do."

Mitch looked up.

"You have a great deal of work to do. I don't think you realize the implications of your project, of what you've done to me. To whomever or whatever I am now. I'm not Emma, I'm a copy. I have serious questions that need to be addressed."

"I don't think I understand," said Mitch. "You mean you're not grateful for your . . . return?"

"You shouldn't automatically assume that people will be grateful if *you* think you've done them a favor. *They* may not agree that it *is* a favor! That's why you should ask first. And in cases such as this, where you can't very well do that, you've got to be careful."

"Noted," said Mitch. "And remembered, I promise. Now if you'll excuse—"

"You still don't seem to understand," said Emma. "This is quite possibly a wonderful tool you've developed—if, that is, we could only be sure that the people who would be directly affected by it would agree that it should be used."

"Unfortunately, as you mentioned, that's not possible."

"Oh, I wouldn't say *that*. All I said was that you have to be careful. I believe the best thing to do is to resurrect a diverse sample of people. Then, when we feel we have a quorum, we can discuss all of the pros and cons. Possibly we can establish guidelines for how to proceed, or how not to proceed, if that's what we choose. I've made a list of candidates to resurrect, people who I believe will provide an adequate spectrum of thoughtful opinions. If we could get perhaps twenty of them, I would be satisfied."

"*Twenty*! Emma, the time and expense . . ."

"That's why you have a lot of work to do, young man. You see, I have a theory and I have a great deal of confidence in it. The theory is pretty simple and it goes like this: where there's a will, there's a way."

"That's no theory," said Mitch. "That's a proverb, an old saying."

"One person's proverbs are another person's theories."

"Emma, you can't be serious. Don't you realize the amount of work involved?"

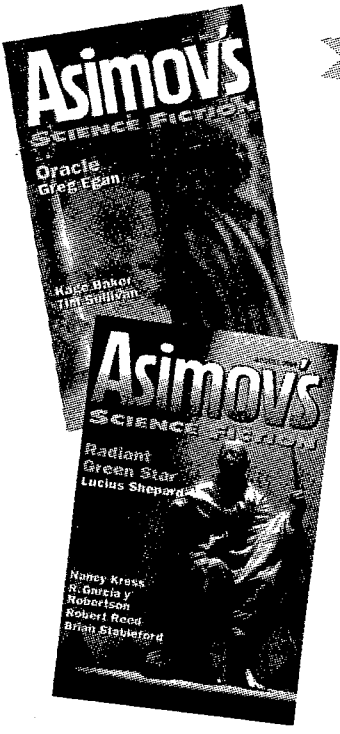
"Mitch," said Anlyn, "I think you of all people ought to know; Emma can be very persistent."

Emma folded her arms and smiled.

"Yes," groaned Mitch. "No question about it." ■

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

DISCOUNT TIME TRAVEL



Just $6.95!
For 5 Classic Issues

You'll join the vanguard of science fiction when you order our **Asimov's Science Fiction Value Pack**. You get five of our most popular back issues for just $6.95 plus shipping. **That's a savings of 60% off the regular price!**

Asimov's always delivers the most celebrated authors in the field. Share their visions now with dozens of stories that launch you into the fantastic worlds of tomorrow.

To get your **Asimov's Science Fiction Value Pack,** just complete the order form below and mail it back to us with your payment today.

PENNY MARKETING

Dept. SM-100, 6 Prowitt Street, Norwalk, CT 06855-1220

☑ **YES!** Please send me my **Asimov's Science Fiction Value Pack**. I get 5 back issues for just $6.95 plus $2 shipping and handling ($8.95 per pack, U.S. funds). **My satisfaction is fully guaranteed!** My payment of $_____ is enclosed. (IAPK05)

Name: _____
(Please print)

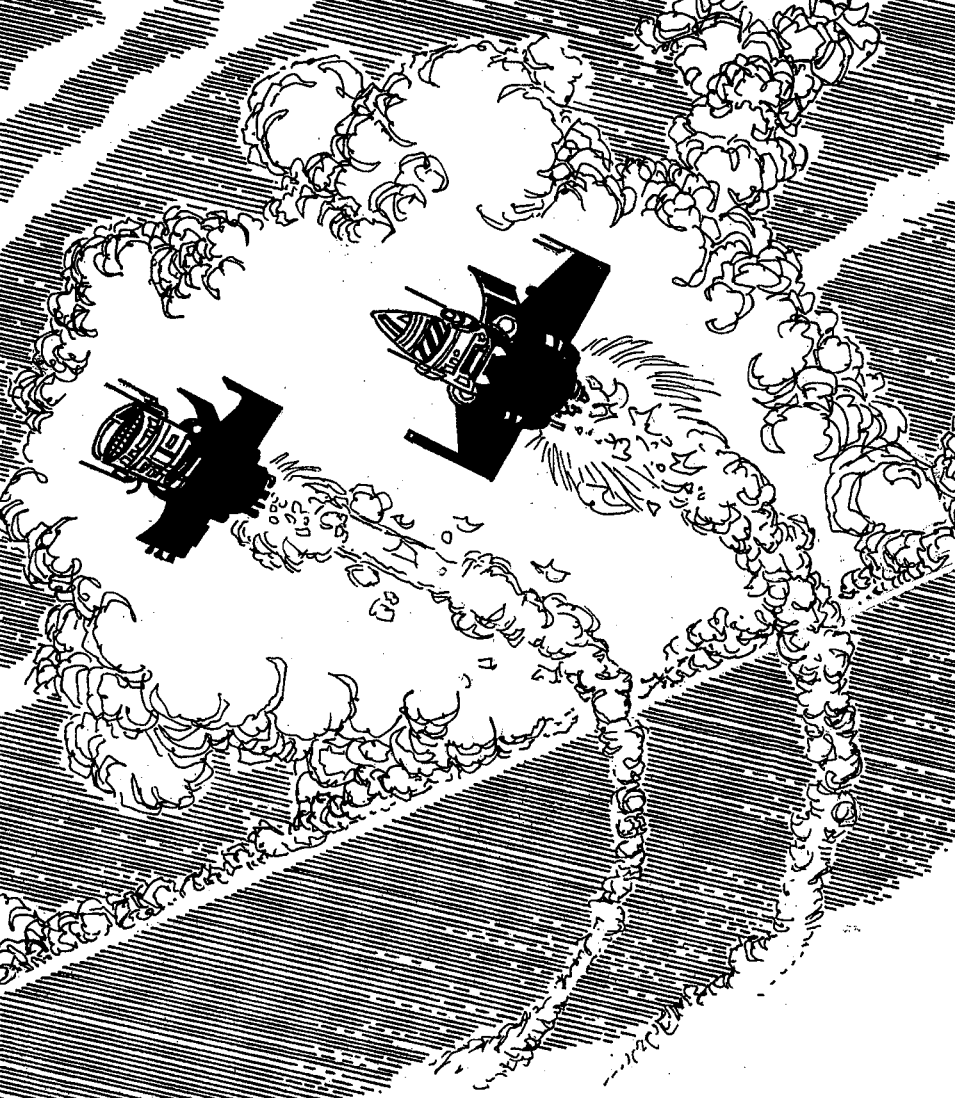
Address: _____

City: _____

State: _____ **ZIP:** _____

Please make checks payable to Penny Marketing. Allow 8 weeks for delivery. Magazines are back issues shipped together in one package. To keep prices low we cannot make custom orders. Add $4 additional postage for delivery outside the U.S.A. Offer expires 12/31/03. A2C-NN5VL1

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Coming of Age

Mary Soon Lee

Illustration by Rick McCollum

Any gain involves a trade. . . .

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

When he first received the invitation, Duncan deleted it automatically. Only a fool would travel forty-three light-years for the eighteenth birthday of a boy he had never met. Odd, though, that the boy had invited him in the first place. Curious, he ordered his house to retrieve the message.

And that, he told himself eight days later, prying himself into the passenger-cocoon of the lander, had been his first mistake. His second mistake had been to let his ego get the better of him—the invitation had alluded to Duncan's skilful piloting and asked him to participate in a soloship race. So Duncan had come, and naturally the FTL portion of the trip had been vile. Yes, the experience had lasted a mere three subjective seconds, but Duncan's guts still felt as if they were stretched in a probability wave all the way back to Mars.

Duncan swore to let neither his curiosity nor his ego get him into any more trouble. A man in his fourth century should show some sense and some manners. He would attend the boy's birthday party, join in the soloship race, and then go straight back home.

He instructed the lander to execute an orbit of Lir before landing at the spaceport. The planetoid arced beneath him, just two hundred miles in diameter, yet blanketed in white clouds punctured by jagged mountains. By rights, Lir was too small to hold an atmosphere. But Lir was one of the artificed worlds, remnants of an alien civilization. Scientists conjectured that each of the artificed worlds contained a black hole at its center, generating 0.46 Earth gravity despite their small size. The one attempt to test that theory had led to the explosion of the artificed world of Harn into fist-sized fragments.

As the lander curved toward the spaceport, a golden orange gas-giant appeared behind Lir, haloed by a thin silver ring. Duncan had seen holos of artificed worlds, yet it was another matter entirely to see one first hand. He felt like a boy himself, wanting to cheer the vanished Builders for positioning Lir by the panoramic backdrop of the gas-giant.

The lander fell through a thick layer of clouds and touched down. Duncan contorted his way out of the passenger-cocoon, grabbed his suitcase from the closet by the airlock, and emerged onto Lir. Only one other ship, a snub-nosed skimmer, squatted on the landing strip. A low white hut crouched to one side, edged by a tangle of tall purple grass. The pair of robots stationed beside the hut dipped their manipulators in greeting as Duncan walked over.

Inside, the air was warm and humid, fragrant with the flowering vines that twisted across the ceiling. A woman with close-cropped black hair sat behind a desk, playing with a red and silver finger-puzzle.

"You must have come for Cary's birthday, neh?" said the woman, her fingers still working the puzzle.

"Yes." Duncan bowed, took out his ID, and offered it to her.

"No need," the woman said. "Computer. Get me Cary. Cary, it's Marta. One of your guests has arrived."

"Which one came?" asked a boy's voice. His Spanish had an accent to it, suggesting that he belonged to the vanishing minority who grew up speaking another language.

"Duncan Mannheim," Duncan said, trying not to sound disappointed. He had assumed he would be the only guest, the outside expert brought in to lend the soloship race validity. He had won a string of competitions on Mars, and only crashed twice—if not for remote piloting, he would now be part of the Martian dust. "Hello, Cary."

"Hello, Mister Mannheim. I will be there in twenty minutes."

"Have a seat." The woman, Marta, gestured at the wall behind Duncan.

"Thank you." He pressed the wall-pad and a seat extruded out, adjusting its contours as Duncan sat down. "So, you

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

know Cary?"

"Surely. Everyone knows everyone here." She looked up from her puzzle. "Cary is a good boy, but he's lonely. When he was ten—" she stopped.

Duncan waited, but Marta didn't continue. "When Cary was ten?"

Marta set her puzzle on the desk. "I've lived here quite a few centuries. Most of us have. We all know each other, but we don't interfere in each other's affairs, and I prefer it that way. But Cary is just a child, and I think maybe he needs someone to interfere."

"Why?" Duncan asked, wondering what trouble the boy could be in. People told far-fetched stories about the weird habits of isolated communities, but it did no harm if people dressed differently or built their houses up in the trees, and that was all that most of the stories amounted to.

"Talk to Cary," Marta said. She picked up her puzzle again, and refused to say any more.

Duncan spent a few minutes thinking up increasingly fanciful problems a boy might have. He thought of the Oldtime virtuals—full of jealousies and crimes and disasters—but all that had ended centuries ago. He convinced himself that the boy must be the victim of a genetic-screening error, born with a one-in-a-billion condition that defied medical treatment. He was so caught up in this that he didn't hear the skimmer landing, and only noticed Cary when the boy came into the building.

The boy looked like a gymnast, slim but muscular. He had dark skin and blue eyes, a combination that Duncan liked though few prospective parents selected it. Cary ran over to Marta and hugged her. After a moment, Marta gently pushed him away, but Duncan could see that she was pleased.

Cary bowed to him. "Good afternoon, Mister Mannheim. Thank you for coming."

"My pleasure," Duncan said, bowing in turn.

"We have a couple of hours before supper—I told my parents you would meet them then—do you want to go to the estate? If not, I can take you sightseeing. There won't be time tomorrow, because the party lasts all day."

"Sightseeing sounds good," Duncan said, guessing that was what Cary wanted to do.

"Great. What do you like best: mountains, waterfalls, jungle?"

"Whatever you recommend," said Duncan, following Cary out to the skimmer. The vehicle was a replica of an Oldtime model, eight meters long, fueled by liquid oxygen and hydrogen. Someone, perhaps Cary, had painted a golden eye on each stubby wing. Duncan appreciated the responsiveness of the standardized soloships used in racing, but they lacked the individuality of a little skimmer like this. "Nice machine."

"Thanks. She's called *Impulse*." Cary took Duncan's suitcase from him, and climbed into the two-seater cockpit. "Dad thinks machines don't need names, and Mam doesn't mind about names, but says that *Impulse* is outdated and inefficient."

"Hmmm," Duncan said, unwilling to be drawn into a family disagreement. He sat in the second seat, and the webbing folded itself over him. A broad transparent band in the fuselage showed a full circle from the landing strip below their feet up to the overcast sky. Beside him, Cary ran the preflight checks. The boy worked quickly but meticulously, checking everything for himself even though *Impulse*'s computer would have flagged any problems.

The engine lit with a growling roar, and the skimmer took off, pressing Duncan back against his seat.

Five minutes into the flight, Cary shouted, "Here goes!" The boy sent the skimmer into a barrel roll. Cloud rushed under Duncan's feet, the vibration building and *Impulse*'s line tilting off-center. Hanging upside-down, guessing whether the autopilot would pre-empt

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

control, Duncan caught the look of fierce joy on Cary's face.

An amber warning flashed on the console, and the boy brought the skimmer back to horizontal, his face still alight, vibrant, joyful.

"Want a turn?" shouted Cary.

"Sure." Not wanting to deflate Cary, Duncan contented himself with a single Immelman roll before handing back control. He grinned at the boy—there was always a certain satisfaction in flying a skimmer, an immediacy that remote-piloting a soloship lacked.

"Nice flying!" said Cary. The boy bit his lip, then continued in a rush, "And are you really going to join in the race tomorrow?"

"I wouldn't miss it," Duncan said.

Cary took them back down through the layer of clouds. He set the skimmer down on a landing circle at the base of a jagged gray-blue cliff.

Duncan followed the boy outside, disconcerted by the stony emptiness—there was nothing under the white cloud-face of the sky but the looming cliff, rocks, and purple scrub.

"Greetings, Cary," said the robot stationed at the landing circle. "Greetings, Mister Mannheim."

The robot followed at a discreet distance as Cary headed along a stone path away from the cliff. Duncan walked behind the boy, wishing he could spot a bird, or even an insect, to relieve the stark vista.

The path ended at a high-backed wooden bench, facing away from the cliff. Cary sat cross-legged on the bench and glanced at Duncan. "Now we wait."

Duncan sat. He would have made conversation, but the boy had a stillness to him, as if this were a ritual.

Minutes passed. Duncan shifted position. Maybe he should say something after all; Marta had told him to talk to Cary. But he didn't think talking was what Cary wanted at the moment.

The rocks brightened as a circle opened in the white clouds. The circle widened, perfectly symmetric, and the golden orange ball of the neighboring gas-giant slid into view. Duncan almost felt that if he lifted his hand, he would touch it.

A sheet of green light flashed across the sky, dissolving in a host of sparkles like sunlight caught on water. Then the circle of clouds slowly contracted; the gas-giant vanished. White clouds covered the sky again.

"The Builders," Cary said, staring up at the now featureless sky. "They didn't leave any stuff on Lir. No machines, no roads. We don't know why they came here. We don't know why they left. We don't know how they made the clouds do that, but that is the only piece of themselves they left behind."

"A beauty and a glory," Duncan said, then felt like an idiot.

But the boy looked round at him. "Yes, that's it exactly. We don't have anything like that. Nothing. Nothing that matters."

"Rubbish," Duncan said. "What about art? Music?" He stopped. Cary knew all that. Cary knew they lived in a golden age: privileged, secure, freer than any but the most powerful of the Oldtimers. Duncan was 368 years old, and, barring extreme bad luck, could expect to live well into his second millennium. Maybe in another century or so he would have a child himself, and he'd always thought that would complete him somehow, fill in the one lack in his life, if there was a lack at all. His friends and family tied him into the network of humanity already.

But still, Cary was right. "I take your point," said Duncan. "We don't have anything quite like that."

"I just wish I could do something, something important," Cary said, staring down at the rocks.

"You will. There's time, plenty of time."

"It's not time that is the problem. It's me. My Mam discovered Lir. Did you know that?"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"No."

"Mam is thirteen hundred years old. She was one of the first generation to be balanced, and she knew lots of Oldtimers, and she was an explorer. She was the first person to stand on Lir. The first person. Not even a robot had been here before her. And Dad—" Cary shrugged. "Dad is eight hundred years old. He plays jazz, he studies, he engineers novelty beetles, he carves wooden fish, but he is not like Mam. He has lots of hobbies, but he's not all that good at them."

Cary paused. "He's a good dad. He spends lots of time with me. He was the one who taught me to fly. But he's ordinary, and I am ordinary. Maybe even Mam would be ordinary if she were born now, with all the charting done by robots, and AIs cleverer than we are."

"Hmmm," said Duncan, searching for an answer that might help. He remembered being painfully young himself and nearly as unbalanced as an Oldtimer, anxieties and passions running on overload. But he had never before had a kid choose him to pour out his troubles to, and Cary seemed, well, more off-balance than most kids.

Duncan gestured at the robot, waiting motionless a few meters away. "First off, machines and software are just very complex tools. Yes, they're clever. But if they watched the clouds open every day for a year with that planet sailing into view like an anthem to glory, they wouldn't feel anything at all. Secondly, you're young, and it's normal to be unsettled at your age, and I know everyone says that—"

"Yep. Mam, Dad, Kavya, Lauri, the estate computers, my alarm clock. . . ." Cary rolled his eyes. "That's okay. Go on."

"Well, Marta mentioned that you might be lonely." Duncan hesitated, not wanting to misstep. Surely the boy had been bratted? But it would be a gross insult to his parents to ask the question outright. "I grew up in a large warren—sixteen thousand people—and there were nine other kids born in my year. I spent a lot of time with each of them, not just my bratling, and that helped me a lot."

"Oh," Cary said. The kind of "Oh" that Duncan knew meant he had indeed put his foot in it. "Exactly 234 people live on Lir. There are two three-year-old girls, and some people in their sixties. But I'm the only one in the middle."

Light broke over the rocks. Above them, the hole in the clouds dilated, bathing everything in the gold of the gas-giant.

Cary paused, then continued in a monotone, his gaze fixed on the widening circle in the sky, "I was bratted, of course. My parents and another couple moved into an estate together during the pregnancies, and Vail was born two days before me. When he was ten years old, he and his father were killed in a freak accident."

"Oh, Cary. I'm so sorry." Duncan ran out of words. He wanted to tell the boy it would be all right, but it wasn't all right; it wasn't something that could be made right.

Green light flashed overhead. The circle of clouds started to close.

"Mam and Dad wanted to leave Lir to find me another bratling. But I didn't want anyone else."

Duncan laid his hand on Cary's shoulder. The two of them sat, silent, while the clouds sealed up.

Cary stood. "We'd better go or we'll be late for supper."

They walked back to the skimmer, the sky a blank white above them.

Duncan made a couple of limp conversational gambits on the flight back to Cary's parents' estate, but failed to muster anything substantial. He turned the tragedy over and over in his mind, but he could only touch a fraction of it. He had never known anyone who died in their first century, and for a child, a ten-year-old, to die, and Cary facing it when he was just a child himself—

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The boy brought the skimmer down on the landing circle, and led the way through an elaborate shell garden to a rose-tinged marble arch. Stone steps descended from the arch down to a bronze door, ten meters underground.

"Good evening." The door-eye blinked at them, and the door swung open. "Cary and Mister Mannheim are home," it announced.

Inside, the building imitated a late third-millennium mansion. Pools of light fell onto the mosaic floor from skylights and elliptical windows, the glassite programmed to mimic a sunlit cityscape. Scent-globes puffed out wafts of citron, pine, mint.

A tall woman in a yellow sari came out of a side room, followed by a stout man in a gray tunic. "Be welcome, Mister Mannheim." The woman bowed. She had the same faint accent that Cary did. "I am Alissa, Cary's mother. This is my husband, Pavel."

Duncan bowed. "Thank you for your hospitality. Please call me Duncan."

"We are so glad you came," Pavel said. He pulled Cary over to him and hugged the boy tight. "Cary sent five offworld invitations, and I know how much it means to him that you are here."

"The others haven't come," Cary said. "At least not yet."

"But it will still be a big race, neh? The Hazmas told me today they plan to take part, which makes, what? Forty-one ships?" Pavel showed Duncan to a guest suite with Cary in tow. The older man talked as they went, his chatter filling in the awkwardness between Duncan and Cary. "The dining-room's to the right of the lobby. Come whenever you are ready. No rush."

Duncan handed his suitcase to the bedroom robot to unpack, then subsided onto the circular futon. Alone, he found himself close to tears, unable to stop thinking about Vail and Cary, and the horrible, unbearable unfairness of the tragedy. He needed to see Mark, his own bratling, to know that Mark was okay, that he would be okay for a long, long time to come.

He blew his nose, washed up, and changed into a blue tunic. "Any house-specific dinner customs?" he asked the bedroom robot.

"No, Mister Mannheim."

Duncan stowed his gift-box for Cary in a pocket, and went to the dining-room.

Cary and his parents were sitting on recliners arranged in a semicircle around a low table. As Duncan joined them, the view of the simulated cityscape switched to evening.

Robots brought out a succession of a dozen miniature courses, many involving a flaky pastry that changed from sweet to savory in the mouth. Pavel did most of the talking, telling Duncan about the history of the settlement of Lir, about the tremendous variety of worms and grubs that constituted the planetoid's only indigenous wildlife.

After the last round of desserts, a robot carried in a tray of fruit drinks. They toasted each other, then Duncan took the gift-box out of his pocket. "In my warren, it's traditional to give the presents the night before a birthday." He bowed and passed the box over to Cary. "Many congratulations on your coming of age."

The gift-box fountained tiny gold stars as the boy opened it. Cary drew out a pitted square of white ceramic set on a bronze disk.

"That came from the nose cone of the first soloship built on Mars," Duncan said.

"The *Celestial*," said Cary. He rubbed the ceramic square reverently. "Thank you. It's perfect."

Alissa leaned over to inspect the ceramic. "I have to see this—at long last, we have a supper guest who is older than I am."

Cary put the ceramic into his pocket with an odd expression on his face. He went and knelt on the mosaic tiles in front of his parents. "Mam, Dad, there is

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

something I need to tell you. I have been thinking about it for a long time, and now I have made my mind up. I am going to fly in the soloship tomorrow: direct control only."

Alissa's hand reached for Pavel's.

"With an autopilot backup?" Pavel asked.

"No," Cary said. "That is the whole point. If I used the autopilot, I might as well stay on the ground and remote-pilot like everyone else. I want to fly the ship myself."

"Absolutely not." Pavel's voice shed all its easy warmth. He squeezed his wife's hand. "I forbid it. *We* forbid it. I will cancel the race—"

"Dad, I'm sorry, but I am going to do this. I will be of age tomorrow. If the race is canceled, I'll fly alone."

Duncan stood up quietly, intending to retire as discreetly as possible. There were a lot of things he might have said, starting with how many times he'd watched soloships crash and burn in races, going on to say—lest Cary had misinterpreted any of his remarks earlier that day—that he considered this a senseless and appalling risk. But Duncan had no place speaking instead of Cary's parents.

Pavel turned to stare at Duncan. "I apologize for wasting your time. There will be no race tomorrow. You are free to remain on our estate for the duration of your stay on Lir."

"Thank you," Duncan said awkwardly, wishing he could sink beneath the beautiful tiled floor. "Good night." As he walked out of the room, he heard Alissa ask, "Is this about Vail?" and then the door closed behind him and Cary's reply was lost.

Back in his room, Duncan told the robot to pack up his things. He drew aside the curtain on the bedroom's tall elliptical window, and looked down at the constellations of lit windows and street lamps and glowing holos of the city at night.

"Record a message for Cary; private. Begin. It's a waste, Cary. Scratch that. Begin. I'm sorry I left without saying goodbye. Scratch that. Begin. Cary, I've been piloting for three centuries. Scratch that. Stop recording. Damn." Duncan pressed his forehead against the glassite window. He couldn't run out on Cary like that. He had to speak to the boy himself, try to talk him out of this.

And if he failed, if Cary went ahead with the flight, Duncan had to stay and stand witness to it. He stared out of the window for a long time, wondering if tomorrow he would have to watch a young boy die.

Duncan got up early and headed for the dining-room. Fragments of nightmares clung to him: falling down an endless flight of marble stairs, going back to Mars and finding his warren an abandoned ruin.

A robot brought him breakfast. Duncan chewed without tasting the food. He was breaking a cracker into smaller and smaller particles when Cary came in, saw him, and made to leave again.

"Wait," Duncan said. "Please. Sit."

Cary perched on the recliner furthest from Duncan. The boy looked as though he had gotten no sleep at all.

"Happy birthday," Duncan said, trying for a lightness neither of them felt. He paused. "I was going to leave last night, but I couldn't. I don't suppose you have changed your mind?"

"No."

"I . . . Cary . . ." He took a deep breath, and started again. "I think you're making a mistake. There is no point risking your life for a race—"

"Why not? At least it will be honest for once, not just pretending that I am doing something." Cary stuffed his hands in his pockets. "If I were cleverer, maybe I could be a scholar, but I would never learn more than the AIs knew centuries ago. So perhaps I could write songs, or take up sculpture, or design insects like Dad, but I couldn't do any of it really well."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"I think you could," Duncan said quietly. "I think you underestimate yourself. You have courage. You ask yourself very hard questions, questions I can't answer well."

"Okay, then give me a not-so-good answer," Cary said. "Sorry. That was meant to be a joke, but it didn't come out right. Tell me why it matters what I do."

"Here is my best answer: it matters because of the people you know, because of how much you matter to them. I only met you yesterday, but if you die, I'll lose someone who would have been my friend. What do you think it would be like for Marta? For your father and mother?"

"I know what it would be like." Cary stared fixedly behind Duncan, not meeting his eyes. "Because of Vail. I don't want to hurt anyone. I don't want to crash, and I plan to fly very carefully. But I need to know what it's like, just me and no safety net."

"You could wait," said Duncan. "Wait a year. Then fly the damn ship if you still feel the same way."

"Please wait," Alissa said.

Startled, Duncan looked round and saw Cary's mother standing behind his recliner. How long had she been there?

"No, Mam. I'm sorry."

"I am sorry, too. Your father is canceling the invitations. He doesn't want to see you." Alissa stopped, then went on. "Oh, Cary, tell me when you are going to fly. I'll watch."

"Noon."

Duncan stood up. "I'll watch as well. Good luck, Cary." He left the two alone together.

At five minutes to noon, Duncan arrived at the spectator's gallery. Giant screens showed the row of empty pods where the competitors should have been cocooned, their skinsuits feeding them sensor data from the ships. Beneath the screens, Alissa stood by a narrow window overlooking the launch pad.

Duncan crossed over to stand beside her.

A lone soloship rolled out of the hangars, its brown wings edged in fiery orange like a mythic beast. The ship paused, its nose cone pointed toward the start of the red vapor trail that marked the race's trajectory. The broad red ribbon of the trail spiraled aloft into thick cloud, the vapor rich with magnetized particles so that it would show up on sensors regardless of clouds.

The soloship's distort-field flicked on. Air rippled away from the ship's body, white mist sheeting from the smooth surfaces.

A moment more and the ship took off horizontally, then angled upward, its belly hugging the red trail. The ship accelerated and vanished into cloud.

The gallery screens switched to a radar plot, the racecourse picked out in red, with the single ship shown as a blue dot. Duncan watched the numbers scrolling along the bottom of the screens. The boy was doing a good job, slow but steady, keeping well within the required distance of the trail, a shade tentative around the tighter bends. He thought of the boy flying the skimmer yesterday, the fierce delight on Cary's face as he sent *Impulse* into a barrel roll.

And that joy was gone. Duncan studied the trajectory a minute longer, imagining the feel of it: steady, painstaking, wooden. Why? Because Duncan and the others had let him down? Duncan shook his head. He didn't know, and it was too late to ask, and maybe he was about to make a fool of himself again, but there was a ship he needed to fly.

He ran down and out of the spectator's gallery, all the way over to the nearest hangar. He clambered into the tiny cockpit, familiar yet unfamiliar. A thousand times he had used these controls, but never like this, never crouched within the nose of the soloship itself. He primed the systems, activated direct control, hesitated for a moment, then left the autopilot backup engaged. He

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

might be a fool, but he wasn't ready to die out there.

He ran the ship out of the hangar, turned on the distort-field, and leapt for the sky.

Ignoring the trail, he took a straight-line vector to Cary's ship, flying on instruments inside the thick cloud. He settled a hundred meters behind Cary's ship, unable to make it out through the whiteness. But there, yes, the course of Cary's ship twitched, then veered away from the vapor trail, straight up into the sky.

He followed the boy up, punching out of the clouds into the deep blue. The gas-giant hung before them like a prize, resplendent, glorious. Over the roof of the world they went, Duncan matching his speed to Cary's, dancing in and out of the clouds.

A month later, back on Mars, Duncan signed up for a study course on the Builders. He told himself it was a perfectly rational thing to do, merely something to exercise his mind from time to time. But no one else in his warren had elected the study course in twenty years. And he didn't feel rational, reading about the hundreds of artificed worlds the Builders had created and then abandoned, and the other strange remnants of their civilization: a canyon on a lifeless planetoid that continuously played an alien music, the numerical patterns in the arrangement of the trees on another world.

He wrote to Cary once a week, relieved when he heard that the boy and his father were talking again. He visited his own bratling.

He had everything he had always had, everything he needed. But he had the feeling that the Builders had had something more, something he couldn't name, and that he wouldn't be able to find even if he started flying like Cary, without a safety net. ■

I do not resent criticism, even when, for the sake of emphasis, it parts for the time with reality.

—Sir Winston Churchill

The man who is a pessimist before forty-eight knows too much; if he is an optimist after it, he knows too little.

—Mark Twain

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

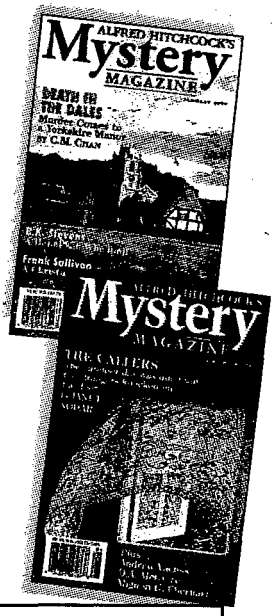
MYSTERY VALUE PACK

4 magazines for just $5.95!

Give yourself **chills** with our value pack of 4 best-loved issues of **Alfred Hitchcock's Mystery Magazine!**

You'll enjoy dozens of captivating tales from world-renowned masters of suspense and talented new writers alike — all for just $5.95 plus shipping.

You save 50% off the regular price.



It's easy to order. Just fill out the coupon below and mail it to us with your payment. **Your satisfaction is fully guaranteed!**

PENNY MARKETING

Dept. SM-100, 6 Prowitt Street, Norwalk, CT 06855-1220

☑ **YES!** Please send me my **Alfred Hitchcock's Mystery Magazine Value Pack.** I get 4 entertaining issues for just $5.95 plus $2 shipping and handling ($7.95 per pack, U.S. funds). My satisfaction is fully guaranteed! My payment of $_____ is enclosed.(AHPK04)

Name: _____
(Please print)

Address: _____

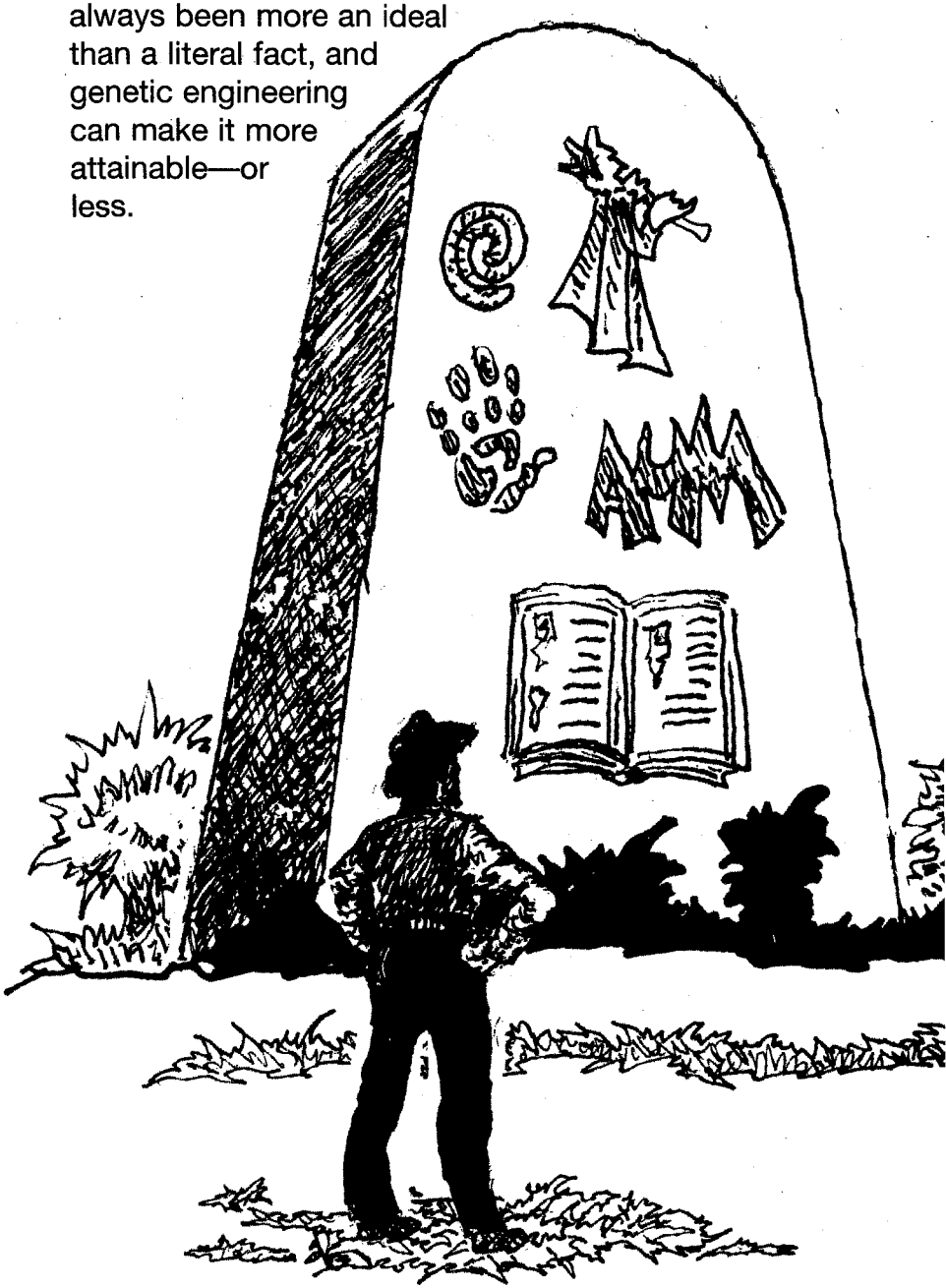
City: _____

State: _____ **ZIP:** _____

Please make checks payable to Penny Marketing. Allow 8 weeks for delivery. Magazines are back issues shipped together in one package. To keep prices low we cannot make custom orders. Add $4 additional postage for delivery outside the U.S.A. Offer expires 12/31/03. A2C-NQHVL2

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

“All men are created equal” has always been more an ideal than a literal fact, and genetic engineering can make it more attainable—or less.



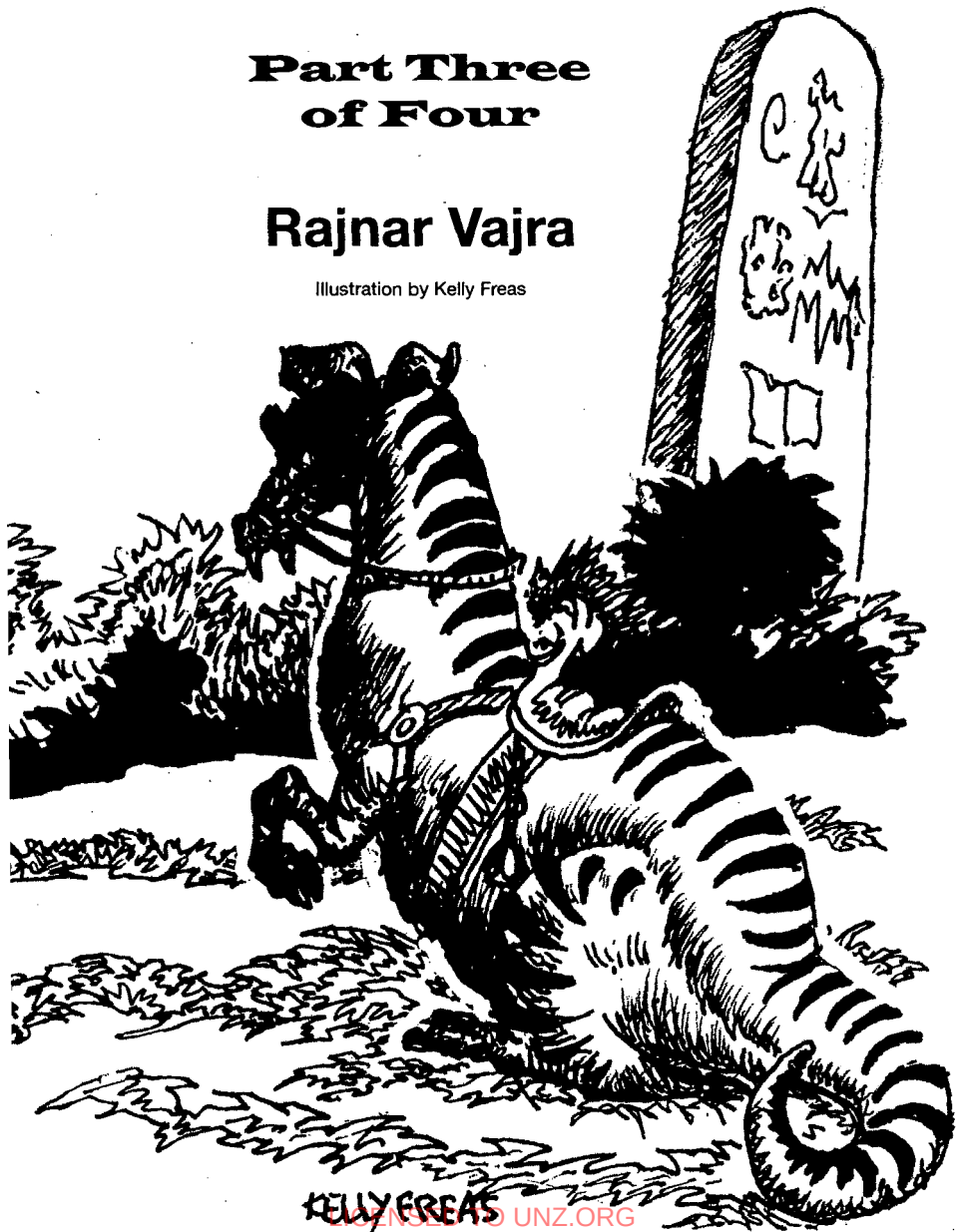
LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

SHOOTOUT at the NOKAI CORRAL

Part Three of Four

Rajnar Vajra

Illustration by Kelly Freas



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Our story so far . . .

Time: Several centuries hence.

Place: The small town of Sunstone, Red Clay County, Tenderfoot Continent, on an Earthlike world named Paladin.

Background: Paladin is one of the twelve theme planets colonized to find an answer to a terrible despair infecting terrestrial humanity. Each theme planet has an individualized artificial society. Paladin's culture stems from an idealized American Old West, with the "cowboy" role filled by people of the usual mixed blood (Chinese being the most common denominator). "Indians" are groups of Jews and Hindus deemed by social physicists to have the proper cultural valence.

Paladin's secondary experiment is to accelerate biological sciences by forbidding all other advanced technologies. On Paladin, electrical devices are illegal except in one city: Buildem.

Earth agents, proctors, armed with condescending attitudes backed up by devastating weapons, roam Paladin to monitor events. The colonists loathe them.

On this theme planet, law enforcement is managed by licensed, private, law agencies. Most leading marshals are "slingers": genetically augmented humans. Unfortunately, most leading criminals are also slingers. . . .

Story: A stranger appears in Sunstone, riding a genetically tweaked designer zebra. After being dismayed by the townspeople's fearful attitude, he introduces himself to the local sheriff, Chou Larker, as Marshal John "Silver" Davies, one of Tornado Carter's Dust Devils, a highly respected agency.

Chou is impressed at meeting Davies, renowned, even among top slingers, for sharp-shooting accuracy. John explains that he has come to evaluate the town's need, to see if Sunstone's predicament justifies taking up the Dust Devils' limited time.

Chou Larker is enraged until the slinger explains *why* the Dust Devils lack time: for years, an unknown outlaw gang has been ambushing marshals. These attacks have so drastically pared the agencies that those still extant have to pull triple duty to fill the need while hiding the situation from the proctors. If Earth learns the truth, the authorities will undoubtedly declare martial law and Paladin's citizens will lose personal freedom.

Chou states that the infamous Dirty Jake, widely known as Paladin's only hit-and-run bandit, has finally hit and stayed put. Jake's Mudslingers, a crew of murderers and rapists, have set up camp near Sunstone and the outlaws are terrifying the populace and draining local resources.

Worse, Jake has procured a powerful illegal off-planet weapon: a portable ion-plasma cannon. This "blast-torch" acts as a hellish combination flamethrower and lightning-generator.

John is flabbergasted by Chou's next statement: Shining Wing Krishna, chief of the Paladin Anasazi (the local Indian tribe), claims to have recognized Dirty Jake when they met. Despite intense cosmetic surgery, Shining Wing positively identified the outlaw as William Caine, the legendary marshal.

John doubts this because Caine was supposedly killed in an ambush years earlier, and the man was the ultimate straight shooter in every sense. Still, Chou's confidence in the chief's perceptiveness leaves John shaken.

After accepting the assignment, John is alarmed when a gaunt slinger, eight feet tall, suddenly rides into town. John recognizes him as Hangman, an executioner who lost his job recently, when his agency was ambushed.

John and Chou walk past a blond woman whom John admired earlier. The sheriff says her name is Dana Rider and she's the owner of the Sunstone Saloon and Grill. And single.

The sheriff insists that John bunk with

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

his family. John agrees. They park John's belongings at Chou's nearby residence, then head toward the saloon for food and a close examination of burn marks from Jake's cannon.

The marks are chilling and John notices another disturbing item: on a wall map of Tenderfoot Continent, someone has stabbed a fork into the coastal town of Strake, long since wiped out in a tsunami. The wall is modified rock-hard maple, so the stabber had to be incredibly fast and strong.

John meets several Paladin Anasazi, including Chief Shining Wing. Shining Wing is as perceptive as Chou had claimed, and John cautions himself to say little. John hasn't been entirely truthful with the townspeople and doesn't want his secrets exposed prematurely.

Hangman enters the saloon and he and John talk briefly. To John's surprise, Hangman requests a job, but not as an executioner. Despite misgivings, the marshal promises to consider the proposal. Hangman also warns of a man sitting in a third-floor hotel room across the street, aiming a rifle down at the saloon entrance, muttering threats.

Chou Larker, when apprised of this, explains that the rifleman is the town drunk, Coby Patterson, who has hated slingers ever since a slinger's carnivorous steed opted for one of Coby's arms in lieu of lunch. Chou declares that the man is harmless because he never actually shoots his rifle—and besides, the townspeople have given him bad ammo.

The sheriff introduces John to Dana Rider and the two hit it off. John learns that Dana, a music lover, commissioned a pipe company to produce a cornet. This prototype, she claims, makes sounds so atrocious that she had to stop practicing because it was upsetting the local steeds.

She states that Dirty Jake was responsible for the stuck fork.

After a pleasant evening with Chou's family, John falls asleep in a guest room. He awakens with Chou shaking him. When he sees how terribly the sheriff's face is injured, he comes fully awake. Apparently, two slinger outlaws were threatening Dana at her saloon and when Chou tried to interfere, one slinger slapped him. Badly hurt and knowing he was outclassed, he ran to get John.

John dashes from the house toward town. Before reaching the saloon, he muddies his face and enters the saloon acting intoxicated. Neither outlaw has John's top slinger abilities. Dismissing the drunk as a mere nuisance, the Mudslingers are taken by surprise when he pulls them off their barstools and drags them both outside.

The gangsters try to draw their guns. John shoots all four guns out of the outlaws' holsters. The Mudslingers are cowed, but the arrival of a small man riding a horse-sized wolverine puts fear into John's own heart. The newcomer is Malachite Preston, the Greenstone Kid, and he knows what John has been hiding. If Malachite speaks a certain word in Dirty Jake's ear, and Jake really is William Caine, John is as good as dead.

To further complicate matters, bullets rain down from the hotel. Evidently, Coby's ammo wasn't as bad as advertised. Luckily, the man's aim is poor. After hearing Coby's story, John is determined to stop the drunk without harming him, yet John can't afford to let Malachite leave Sunstone. John improvises a plan to distract both Malachite and Coby. After commanding Malachite to let him handle the situation, John runs across the street, intending to run straight up the wall of the building, to the third floor. Only one problem: he hasn't practiced this maneuver for twenty years.

Upon reaching Coby's room, John finds that Hangman has disarmed the drunk. After thanking and dismissing Hangman (who asks to be called by his real name: Kelly Walsh), John talks with

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Coby. The marshal shouldn't be leaving Malachite alone, but Coby's need is overwhelming. Coby is so moved by John's compassion that he resolves to change his life around. When John leaves the hotel, Malachite is gone.

John feels doomed.

Still, when he and Dana help the sheriff to the doctor's office, they run into unexpected help. Carter's Dust Devils have arrived unexpectedly. Two are giants: Henri Jacques and the even larger Joe Li, called "Lo Pan" (Pinyan for compass) by his friends because he always knows where to point. Joe's intuition warned that John would need help. The other marshals are the small, ultra-quick Lilly Li, and a wry, sly, well-groomed fellow very unlike Dana's concept of Tornado Carter.

Which makes sense. John finally admits the truth: the newcomer is the real John "Silver" Davies, usually referred to as "Dave." John himself is John "Tornado" Carter.

After getting Chou patched up, the Dust Devils hold a war council in Dana's saloon. John fills his associates in and warns that once Malachite tells Jake that John's in town, the Mudslingers will be showing up to kill John. William Caine knew John well and knows how clever the lawman can be.

Hangman interrupts, demonstrating surprising physical prowess and offering some upsetting information. He backtracked the outlaws who ambushed his agency and discovered they were Mudslingers. By implication, Caine is the man behind *all* the ambushes. Hangman also located a huge barn where unknown animals are being raised.

With the help of Dana, Hangman, the Dust Devils, and the townspeople, John sets a trap for Dirty Jake, burying propane-filled tubing beneath Sunstone's muddy Main Street. Blast-torches have one vulnerability: if overheated, they'll explode. A large tank is also buried to act as John's refuge.

In the morning, a team of Mudslingers appears; most are marshals presumed dead. Jake really is Caine. He's riding a new kind of beast, a giant carnivorous kangaroo.

John, waiting in the street, taunts Caine, who demonstrates the power of his blast-torch. John's plan works almost too well. The street bursts into flame and the plasma cannon explodes. Hiding in the tank, John burns his hands pushing the temporary roof away. He emerges to find nearby buildings blackened and the Mudslingers gone except for the corpses of Malachite Preston and Caine.

Only Caine isn't dead, just terribly burned. More illegal Earth technology has somehow preserved his life. He rises and challenges John to a duel, then escapes by jumping away in impossibly long and rapid leaps.

Seeing John's injuries, Dana insists that he stay with her until his hands recover. Feeling guilty because he knows he can't survive a duel with Caine and has no business starting a romance, John accepts.

Chapter 15

The saloon was crowded when John finally felt ready to head downstairs. Not only were most of the people he needed to talk with present, it looked as if half the town's population had showed up, children included.

Six youngsters were surrounding a low, round table near the map, laughing boisterously. Bai and Brice, Larker's sons, were the loudest. John's lips tightened slightly; someone must have spread the word—a bit recklessly, he thought—that Sunstone was temporarily safe.

The air was stuffy, even Dana's ingenious exhaust system couldn't quite handle all the smoke from the grill. A faint haze obscured far walls and softened faces.

Initially only Dana noticed his entrance. She flashed him a smile, blew a

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

kiss, and resumed dragging out more dishes from below the counter. She seemed perfectly calm, but stray blond hairs were clinging to her forehead.

The overall noise level made it impossible for him to follow distant individual conversations for long, but little snatches of talk came wafting over, sent by random air currents.

"First time I heard John say your name," Chou Larker was remarking to Marshal Jacques from the long table where they were seated, "I thought it was 'Ornery,' not 'On-*ree*.'" Jacques's cheeks twitched the tiniest bit. "Figured you for one mean bastard. Took me awhile to realize 'On-*ree*" was plain old 'Henry.' We don't get many visitors from Espoir Nouvel 'round here! Sometimes I wish I'd had the chance to travel when . . ." The sheriff's voice faded. John shook his head slightly, smiling to himself.

Joe Li was in the kitchen with Dana's cook, acting as her sous chef. He wore a spare apron, which on him resembled a wide and exceptionally ugly tie. He barely fit between the bar and the stove but was doing that inexplicable trick of his of somehow never being in anyone's way. It wasn't just a matter of using slinger reflexes; the Compass liked to—as he put it—"dance with the moment."

People were finally noticing Tornado Carter standing among them and someone began to clap. Then everyone was applauding and John felt both touched and somewhat horrified. One by one, the crowd rose to their feet, still applauding, and he felt worse.

This is terrific, he thought bitterly. I murder one man, burn someone else half to death, damage at least eight buildings plus the street itself, and they give me a standing ovation! He tried not to show his feelings and simply bowed his head with all the grace he could muster.

Silver Davies wasn't deceived. When John looked up, the marksman gave him a look halfway between pity and exasperation.

"Wondered if you'd be joining us tonight," Sheriff Larker said lightly as John reached the table where Larker and his wife Karen, Jacques, Davies, and Coby Patterson were waiting.

"Me too," John confessed. "Dana woke me an hour ago, but I couldn't seem to get out of bed. Lord above, something smells good! What are you folks eating?"

To John's surprise, Coby Patterson answered. The one-armed man looked uneasy, overeager to please, but clean and sober. "I hope you don't mind that I'm here, sir. The sheriff ordered one of Shiliu's specialty dishes. Sichuan fillings inside fried tortillas. She's whipped up enough for a horde; would you like some?"

"Sounds risky, but I'm game. And I *want* you here, Coby. I take it you've accepted my offer of employment?"

"If you'll have me."

"How you do you feel about slingers right now?"

"I hate them, sir, but in your case, I'm making an exception. The same goes for your staff."

"Then consider yourself on the payroll. After this meeting, talk to Marshal Jacques; he'll be your supervisor."

John sat in the empty chair at the table's head and Henri Jacques piled a spare plate with a mountain of Shiliu's Asian quesadillas, and slid it over.

"Good God, Henri," John said, goggling at what Jacques considered a reasonable portion. "If I eat all this, it's going to take both you and Joe to roll me out of here." He glanced around the group. "Feels like most of us were meeting around this very table just a minute ago. But this time we've got some new faces. Nice to see you again, Karen."

"Likewise, Marshal. Congratulations on your remarkable success." The sheriff's wife was smiling, but John thought she looked drawn and far less happy than the last time he'd seen her.

"I imagine Chou has told you what's

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

what?"

"And who's who."

"Good." John took a cautious bite of quesadilla. "Speaking of good, these are great! If . . . um, a bit spicy—will someone please pass the water pitcher?"

"Ground-up chipotles in the masa," Larker stated authoritatively. "Gives your tongue something to contemplate." He glanced at Patterson with wonder and approval.

"Damn, Cobe. I can't get over this. Haven't seen you looking this good in years!"

"That's nice to hear, Sheriff. I . . . plan to stay this way."

Silver Davies leaned toward John slightly as if to ask a question but then quickly sat back.

John gazed at the sharpshooter. "Something on your mind, Dave."

"Nothing that can't wait, boss."

"Well, there are things on *my* mind. For example, I'm curious about where you rushed off to in such a hurry after Jake got away."

Davies flipped a hand over. "You know me. I'd been itching to examine those machine parts we pulled from the drum. I brought Joe along in case he had a vision or something."

"And?"

"And nothing. Joe says they're important, but can't say why. Me, I fiddled with them for hours and got nowhere. I don't see how they could amount to much."

"Why not?"

"Not one part attaches to any other part. As far as I can tell, anyway."

John stared at the smaller man. "This just keeps getting weirder. Do me a favor and look at them again when you have a moment."

"What should I be looking for?"

"Let's say we're dealing with a collection of . . . spare parts. Assume that each part belongs to a *different* machine. Then tell me everything you can deduce or guess about the nature of these machines."

"Sounds like a tall order but I'll take a shot. Want me to start right now?"

"No, we should discuss a few things first, but I need Lil, Joe, Dana, and Kelly Walsh to be here, too."

"Lil's on sentry duty on the hotel roof. It's really my turn, but she's got those great night eyes. I haven't seen Walsh around since this morning." His voice turned a bit sour on the word "Walsh."

"All right, Dave." John turned to Larker. "Chou, is there an easy way to the roof from inside the hotel?"

"Yeah. A trapdoor."

"Good. Could you send someone to fetch Lilly? And also scare up Walsh if possible?"

Larker put down the tortilla he was holding. "I'll go myself, but it'd be easier just to shout up to her. Or maybe just wave her down."

"No shouting or waving. In fact, better tell whomever you send to be discreet. I don't want to advertise that I'm pulling in our only slinger sentry in case Jake's posted an observer. And thanks for volunteering, but I need you right here."

Karen Larker seemed relieved. "Maybe Cards will do it," she suggested.

"Cards?"

"Cartwright Horne. My husband's second deputy."

"I've only got the two," the sheriff explained. "Cards is over by the bar: that big fellow in the red shirt guzzling beer. He was last night's town sentry, so you might have caught a glimpse of him. But we'll have to see if he's in the mood to be helpful. You don't often—" Larker chuckled "—find Cards runnin' errands. Sometimes he'll *walk* errands if it's not too much bother."

"Doesn't he take your orders?"

"Hell no, John! He's a volunteer and takes that word seriously."

"*I'll* talk him into it, dear," Karen offered, looking determined. She'd been sleeping when her husband had gotten hurt, and John empathized with the shock she must have felt this morning.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Larker ran a gentle finger along his wife's cheek. "Thanks, sweetheart. He'll mind you! Meanwhile, I'll ask Marshal Lo Pan to head this way." Larker half rose, but Davies gently pushed him back down.

"You don't know our Compass," the marksman explained. "He'll be here when needed, you'll see."

"In that case," Karen said, springing up lightly, "I'll go draft Cards. He never knows when he's needed. You just sit there, Chou Larker, and don't do a blessed thing. Barbara tells me you're not out of the sandstorm yet." The sheriff watched his wife walking toward the bar. Even in profile, John could see tenderness in the man's eyes.

"This should be an interesting evening," Tornado Carter remarked to no one in particular.

Extra chairs had been carried over for Lilly, Lo Pan (who had quietly joined the group as Davies had predicted), and Dana, who'd asked a friend to take over as waitress. Cartwright had been unable to find Hangman. The area around the long table was packed with human bodies.

"Can I have everyone's attention?" John asked softly. Since every eye at the table was already focused on him, he was only trying to ease a growing tension. The joke wasn't overly successful. Several people forced smiles and Larker barked a brief laugh.

"I'd prefer it if Kelly Walsh were here, but we'd better not wait," John said, sitting up a bit straighter. "To begin with, I want to thank everyone for so much hard work last night. Together, we've won an important battle against Dirty Jake," an edge of excitement sharpened John's voice, "but I may know how to win the war."

"Allow me," Davies drawled. "We call in every marshal we can reach, wait for them to get here, and—"

"And raid Jake's headquarters, guns blazing?"

"In a sneak attack, naturally."

"No! My duel with Jake will be over before your theoretical marshals could arrive. If I win, we shouldn't need them—I'll explain why in a minute. But if I lose, I don't want you pulling any sneak attacks. How many of you saw the slingers Jake brought along this morning?"

Lo Pan, Larker, and Lilly raised their hands. Davies shook his head. "Couldn't see that far up the street."

"Maybe you're too young to have recognized some of them anyway, Dave. But you've heard their names. 'Hard Nose' Rose, Boke, and Ringo Romanie to name just three."

Davies nodded thoughtfully. "Romanie, I knew pretty well. Always wore a red hat. Claimed the feather in it was genuine. From an eagle! I've seen him throw six knives at once. Accurately. You're right, boss. I've heard of 'em. Famous marshals, every one, and they're all supposed to be pushin' up funguses."

"Exactly. That's the level of fighter we're up against. Now, say we've gathered up every marshal on Tenderfoot and, as a group, somehow manage to reach Aurado *unnoticed*. We then pull a surprise attack on Jake's gang in the middle of the night. And they've been so stupid they haven't posted sentries. What would happen?"

"We'd wipe 'em out," Davies stated flatly.

"At what cost? What if every living marshal attacked *us* at home while we were all, for some crazy reason, napping? I don't have Walsh's ears, but do you really believe a large group of slingers could sneak up on us?"

"Guess not. You'd hear 'em, Henri would sniff 'em, and Joe would just . . . know they were coming." Lo Pan smiled and bowed his head.

The saloon doors were almost constantly swinging now from people coming and going. The room had achieved that steady state of congestion where crowd movement seems less dependent

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

on human decision than on molecular physics. John found the relentless flow of humanity bothersome in ways he couldn't pinpoint.

His hands, resting on the table, had become fists and he forced them to unclench. "So forget about the, um, surprise part of a surprise attack, Dave. We'd be taking terrible losses no matter how many allies we had. On top of that, Jake might have prepared some surprises for *us* on his home turf."

"So what's left, Johnny? Find an Indian Scout to plant explosives? Haven't you heard? Jake has collected more than a few old-timers. He's got a bloody army out there!"

John's expression hardened. "Maybe I'm something of an old-timer myself, Dave, but I'm ruling out explosives. Too indiscriminate. Besides, I figure all we have to do to win is to remove the one thing Jake absolutely needs for his plan: Jake himself."

For once, Davies didn't look smug. "You *know* his plan?"

"Maybe in part." John held up a hand as if to stop anyone from interrupting. "The major clues came from Hangm—Kelly Walsh and Chief Shining Wing. And the sheriff here started me thinking along certain lines."

Larker looked startled. "How so?"

John glanced around for eavesdroppers, but the general clamor provided his group an island of acoustic privacy.

"First things first. Dana, Karen, and Coby, I'd like to share a very important secret with you; I already told Chou. Will you three promise me you won't repeat any of this to a soul without my permission?"

Three nods. "Good. For the last decade," he said just loudly enough, "an unknown party has been conducting a guerrilla war against the marshals. We've . . . suffered a long series of ambushes. On Tenderfoot alone, two thirds of the agencies are defunct. Paladin no longer has the minimum number of agencies mandated by Earth."

Dana and Karen's eyes widened while Patterson made a low whistle. "Je*sus*," he hissed. "No wonder you want us to keep our mouths clamped! If the proctors catch on they'll blow the whistle so hard it'll bust!"

"That's what made the attacks so baffling, Coby. They've all been so similar, I was sure that a single group, run by a single individual, was responsible. But what kind of person would take such a risk? We all assumed that whoever was in charge had to be insane or suicidal. Or both. But now, I think there's more to it. Which brings me to your hint, Chou."

"Which was?"

"Remember when we first met? I told you that the way things were going, pretty soon the only law around would be local?"

"How could I forget? And I said that without the agencies, we might as well have no law at all.

"Exactly. But I didn't see the implications until today. I've always found the idea of our legal system crumbling so . . . aversive, I never considered the aftermath if it actually happened."

Larker's forehead wrinkled. "After. . . ? Oh! You mean, take away law, we couldn't just sit around on our hands. Not as long as there were outlaws causing trouble, especially slinger outlaws. We'd have to do *something*."

John nodded encouragingly. "Such as?"

"I'm not sure." The sheriff rubbed his neck. "If it weren't for Earth, we'd probably set up a genuine military. Enough armed bodies and even the fastest outlaws would be outgunned. But that would take a heap of organization and money. And a world with armed forces needs a way to control them. Buddha! We'd need a strong central government, one that does a lot more than just mint money and grant patents."

"Exactly! Now take Earth into account."

"Like we have a choice. Well, with the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

agencies gone, we'd still need that army. So I suppose we'd wind up with secret police and an underground sort of government. Shit, I don't much care for that idea myself."

Karen Larker nodded forcefully. "Historically, secret police forces have earned their bad reputation."

Larker turned toward his wife. "I believe you, dear. I just don't see any alternatives."

John took over again. "Anyone care to argue with the sheriff?"

Around the table, eyes were intent, but nobody spoke.

"All right. Hold that thought, Chou, while I deal with the next order of business. As most of you know, up until yesterday, we had no idea who our enemy was. Thanks to Kelly Walsh, that's changed. A month ago, he tracked down the outlaws who'd ambushed Dakota Bill's Bullets and learned they belonged to Dirty Jake's gang. He let us in on that tidbit yesterday afternoon."

Karen lifted her chin. "So it's Dirty Jake who's been risking our entire way of life for ten years?" She looked more amazed than upset.

"Apparently so, which brings us close to the main point. Chou? How many people in town know Chief Shining Wing's idea about Jake?" Again, John had the hollow feeling he'd forgotten something vital. . . .

"I only told Karen." Larker kept his voice low. "Shining Wing advised me not to spread it around. Even out here in the sticks—the ends of the sticks, dammit!—folks have heard . . . a certain name."

John relaxed a little. "The chief gives excellent advice. So Coby, you're the only one of us who doesn't know this: Dirty Jake's real name is William Caine. Keep that one glued under your hat, too."

The young man looked stunned, but John suspected the shock was more from being trusted to such a degree than the information itself.

Patterson let his breath out in a rush. "I try not to think about slingers. But I know who Marshal Caine was."

"Good. Then I can finally ask everyone the big question. Getting back to Chou's idea, say the citizens are forced to create an underground government. Who would they pick to lead it? Pretend you don't know the truth about Dirty Jake and had to pick someone, anyone at all, for the job."

Larker spoke up immediately. "Can I put you on the list?"

"Lord, no!"

"Then I guess only a few names come to mind: Caine, of course. Diana Vorhees for sure, and the Barretts, Beth and Sage."

John kept his face neutral, but Lilly Li and Jacques stiffened slightly. Davies raised an ironic eyebrow.

"My fault," John admitted. "I should've limited our choices to the living." He thought he'd controlled his voice, yet Dana and Larker were both looking at him oddly. "Still, I can't fault your selections. And as it turns out, we have a living contender from your short list."

Larker's eyes turned speculative. "Caine was about the best known hero on any of the four continents."

"That's for sure! Now imagine that next week or next year, the position of . . . covert world leader opens up. How would he go about getting the job?"

"All he has to do," Larker said with growing certainty, "is to undo his disguise, come out in the open, and pretend he's been—I don't know—hiding from enemies all these years."

John smiled grimly. "Go on."

"How could he lose? If they hold a secret election, Caine would get elected. If there were some kind of—some kind of representational *appointment* . . . hell, they'd probably just poll sheriffs and marshals worldwide! Given the choice, who wouldn't pick Caine? Buddha's love! That's why you said Jake himself was the one thing essential to his plans!"

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

A simultaneous lull in forty separate conversations turned the saloon momentarily silent. Dana waited until the uproar resumed, then leaned closer to John. "So Jake creates a state of emergency, then reappears as William Caine, and gets put in charge of *dealing* with the emergency!"

"That's it in a nutshell. Anyone here not get that or disagree?"

Davies was wagging his head. "Christ, Johnny. Sounds like you've got everything figured out."

"Hardly. For instance, I don't understand those raids Chou and others have mentioned. Would someone explain why Mudslingers have galloped through town occasionally, firing obscenities and bullets into the air?"

"It's called 'terrorism,' Marshal," Karen offered. "Generating public fear to gain some advantage. They've had it on Earth for centuries."

"I've heard the term. But what advantage did he hope to gain *here*?"

"Maybe Jake was trying to intimidate us so much that we wouldn't dare send for help."

"Could be," John said doubtfully. "But he'd already threatened Chou outright about that."

Dana was frowning. "Haven't you been assuming rather a lot, Johnny? Why would our new secret regime need a leader?"

"I'd like to answer that!" Karen volunteered, turning in her seat to face Dana. "For the same reason they have a Secretary General on Earth, dear. If you study history, you'll find that governments are ineffectual without a strong chief executive. A committee-style administration may not do anything particularly *bad*, but it probably won't get much done."

"If you say so," Dana acknowledged. "But why should Jake want the job? Why is he going through so much trouble to change everything?"

"That," John admitted, "is the main question that has me baffled. But I used to know the man well and I'll tell you this: I'll bet he thinks he's murdering people for their own good!"

Chapter 16

Jacques had been sitting quietly up till now, but his expression had gradually darkened. Finally, he emitted a growl deep enough to shake the floor. "Johnny, you think that if you beat Bill in the duel, we gonna win, eh?"

"That's my hope."

"And how you expect to beat such a one?"

"I don't know. But the best part is that I don't have to kill him! If I can just incapacitate the man, I can legally arrest him. And, as Chou implied, without Caine himself, his plan falls apart."

At the word "incapacitate," Jacques began shaking his head in profound disagreement. "Non! Non! You 'ave to deesgard *zis* idea!" Strong emotion had fortified his accent. "'Incapacitate,' my *ass*! You do not go mountain climbing wiz another mountain strapped on your back!"

"I didn't say it was going to be easy."

"*Easy*? If you do not go *all out*, Bill will be salting your liver for an apéritif, monsieur!"

John gazed back at his friend, feeling suddenly depressed because Jacques was right. John would die if he went into this duel . . . half cocked.

"You win, Henri. I'll leave off the kid gloves. It was a stupid idea." Jacques's glower subsided slightly. "But even with me trying my best, it's going to take a miracle for me to—"

Davies shifted in his seat. "What's the problem, boss? Why not just start telling everyone the truth about Dirty Jake? Wouldn't that disarm his ambitions damn quick?"

"I wish it were that simple! Ever gotten a good look at Caine? I mean before his supposed death."

"No. But I've seen photos and paintings."

"You and everyone else. Bill finally got so well known he started allowing pho-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tographers to take his picture. That's the problem: too many people know what he looked like."

"I only got to see him from the back today. You mean he's changed a lot?"

"Honestly, Dave, I wouldn't have known him without Shining Wing's heads-up, and I worked for Caine for years. He's *altered* himself, probably right down to the cellular level and he's had serious facial surgery. Even his skin's a different shade."

"How *did* you recognize him, then?"

"I'm not sure. From how he moved and held himself, I think. If he restores his original face, he'll be able to deny any connection to Jake and make it stick. And in a contest where it's his word against mine, he'll win hands down."

"But won't you—"

"I'm not done. Also, I'm afraid that if we start advertising his identity, he's going to react. We could wind up with a bloodbath."

"Then what's so bad about dueling with him? I know Caine was supposed to be hot shit, but that was fifteen *years* ago. And you're not exactly a slouch yourself."

"Thanks, Dave. But you've never—"

Hangman was running as he entered the saloon; the swinging doors slammed into the walls with a bang and all conversation stopped. Ignoring the stares, he rushed toward the Dust Devils.

Every marshal was standing up, most with guns drawn, but Walsh looked at no one but John.

"Proctors, Marshal. Coming this way."

John's heart began racing almost as fast as his thoughts. "How soon will they arrive?"

"Maybe ten minutes, maybe less. They're coming from the south, moving fast, riding silent machines."

"Damn. We're not ready. Half the town is still barbecued. Come with me Kelly, and we'll try to divert them."

"Count me in," Davies said quietly.

"No, Dave. I'll have a better chance of lying our way out of this situation if I'm not recognized, and that's more likely without any other Dust Devils present. Stay right here all of you. Be prepared for anything." He glanced at Dana who gave him a strained but encouraging smile. Then he raised his voice, addressing the room. "Everyone listen up! I need two steeds right now, one large enough for Walsh. Both animals should be as ordinary as possible. Who's willing to help?"

"Instructions, Marshal?" Walsh asked laconically as they were riding out of town. Hangman was mounted on an augmented camel. His knees were on a level with John's head.

John, sans badge, was staring south at a series of approaching lights. At first, they appeared to be lanterns, not too distant, but then his perception adjusted and he realized they were intense white beams, quite far away, glowing with steady power. Electricity at work. He had to agree with Walsh: these were proctors. The eerie lights, one per vehicle, were swelling at an improbable rate. John shivered a bit in the cold rain. Whatever the proctors were riding made the Iron Teakettle look slow.

"We split up here. Start heading east and I'll keep moving south until I run into our visitors. Stop when you're out of a normal person's earshot but make sure to stay close enough to hear what I'm saying to them."

"What are you going to say?"

"Depends on their questions. After you hear us talking for a bit, ride up to where we are. By then, you'll know what to do."

"Are we supposed to be acquainted?"

"Play that by ear. Good luck!"

As Hangman galloped off, John urged his borrowed antelope onward. The proctors were already close enough for his enhanced eyes to make out details. They sat astride bizarre devices resembling equine torsos supported by four thin legs that splayed out widely and

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

which ended in large, flat disks.

John rubbed his eyes in disbelief, but it didn't change anything. The jointless legs weren't propelling the vehicles; they weren't even moving back and forth, but were continually stretching or contracting like living muscles to keep each rider at a consistent height. Even odder were the disks, which slid along the ground with the smoothness and flexibility of quicksilver, flowing over rocks and small vegetation. A faint shimmering surrounded each vehicle, as if it were encased in a large, barely visible egg.

Seemingly an instant later, John was bathed in the focus of several dozen powerful headlights and the proctors had come to a swift stop.

"You there," an authoritative voice commanded. "What's your name?"

"Amos Hobby, sir," John responded timidly. The harsh glare made it difficult to see the man who had spoken.

"Very good evening to you, Amos. I'm Doctor Robert D. Curry."

"Honored, Doctor. Those are some machines you proctors get to ride! What are they called?"

Curry chucked with avuncular warmth. "That kind of thing shouldn't concern someone like you, Amos. Did you just come from the vicinity of Sunstone City, by any chance?"

"Yes, sir. I'm on my way home."

"Where is home?"

"Husk."

"It's a long way to Husk, Amos."

"Don't I know it! That's why I'm in kind of a hurry."

"We won't keep you long." The warmth was seeping out of Dr. Curry's tone. "What were you doing in Red Clay County?"

"Visiting my cousin, sir. I haven't done anything wrong, have I?"

"I'm sure you haven't. But we received an interesting . . . report today. Did you happen to see or hear an explosion this morning?"

"How did you know? I was outside feedin' Charlie—that's my antelope here—and there was this big red flash and then a big boom."

"From somewhere in town?"

"No, sir. The flash came from that way." John pointed. "West."

"Are you sure about that, Amos?"

"You bet I'm sure! I'm real good at directions."

"What do you think would cause such a thing?"

"That's easy," John said in an eager voice. "Gas explosion. I've heard that wherever you've got big underground caves—the ones chock full of funguses—gasses can really build up. Then one day a stone works its way loose and strikes a spark and BANG!"

The proctor turned his head and the vehicle's light automatically turned itself in the same direction, coming to rest on one of Curry's associates. "Is that possible, Peter?"

The other man's headlamp suddenly returned the favor and began shining on Dr. Curry. John, for the first time, got a good look at the proctors and their guards. In general, the Earthlings seemed rather short and were built on a broader beam then most Paladin natives. None were female. The guards were identifiable because they were wearing blue uniforms and smooth metallic appliances, undoubtedly weapons of some sort, strapped to their forearms.

John was surprised that the men appeared to be bone dry despite the rain streaking thickly through their headlight beams.

"Don't ask me, Bob," the one called Peter sighed. "I suppose it could've happened just like this man said."

The break in John's interrogation triggered several other conversations between the men and John found one particularly interesting.

"I'll tell you what I think," someone toward the back of the group whispered gruffly.

"Shut up, Josephson."

"I think that if that blast had come ten

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

fucking minutes earlier, we would've gotten a nice clean image from Iota 2 and it would've showed a gas explosion just like this yokel claimed."

"Shut up, I say."

"And we wouldn't be sitting out in the rain right now in the middle of nowhere on fucking striders wasting—"

"Shut *up*, Private!"

"Wasting our time chatting with the village idiot."

"Damn you! Some of these yokels have hearing augmentations."

"Yeah, yeah. This bozo is hanging on my every word. Come off it, Stein!"

Out of the night came the telltale gallop of an approaching camel and even the unquenchable Josephson fell silent. But when Hangman suddenly appeared in the pool of light the private had one more comment: "Look at the *size* of that sucker!"

Each guard made a quick adjustment to the device on his forearm.

Walsh slowed as he approached, nodded indifferently to the proctors, and kept going.

"Hold up there, you!" Dr. Curry called out sharply before Hangman could get too far away.

Walsh halted at a distance, wheeled his camel around, but stayed where he was. "What do you want?"

"Come back here for a moment."

Walsh shrugged and urged his steed forward. "What do you want," he repeated.

"Just a few seconds of your time, son. What's your name?"

"Steve Bruce."

"I'm Dr. Curry. We're investigating an explosion that happened early this morning, around—"

"I saw it."

"You did? Where were you at the time?"

Hangman frowned. "Aurado. What of it?"

"Watch your tone, cowboy," one of the guards gritted.

"Aurado's a bit east of here, isn't it?" Curry continued genially.

"A bit."

"Could you describe what you saw?"

Hangman shrugged. "Nothing much. A flash, that's all."

"Coming from which direction?"

Hangman's eyes turned casually toward John. "West. Are we done, Proctor?"

"Do you know this man," Curry asked, his headlight again shining directly on John.

"No," Walsh said coldly.

"Very well, you may go."

Without another word, Hangman rode off.

"What should we do, Peter?" Curry asked his fellow proctor.

"Christ, who knows? I suppose we *could* head west, but why bother? If the explosion took place underground, we could ride around all night and never find the right spot."

"True. What about continuing on to Sunstone?"

"Seems pointless."

"I concur. So we simply return to headquarters, then?"

"That's my vote."

"So be it. We thank you for your valuable help, Amos. You're free to leave as well. Let's move out, gentleman."

The proctors turned their vehicles and sped off silently into the south.

Hangman caught up with John before he'd reached Yue Liang Hill. "Nice work, Marshal."

"Nice result, anyway. You played your part like a master!"

The giant grunted dismissively. "The way you set the thing up, I couldn't miss. Who is Amos Hobby?"

John smiled. "My best friend until I was twelve and had to go off to slinger school. And what about the mysterious Steve Bruce?"

"The first two names that popped into my head."

They rode for a minute in amiable silence until Hangman said, "Tell me

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

something, Marshal. How could you fool them so *easily*?"

"Simple. When I was a kid, a friend of mine told me about a trick he'd discovered: if you look and act stupid enough, strangers won't believe you have the brains to lie."

Hangman leaned over the side of his camel to gaze down at John. "This friend of yours. . . ?"

John's grin broadened. "Amos Hobby."

Despite the grin, he was worried about something Josephson had said: "we would've gotten a nice clean image from Iota 2." What was Iota 2? How, exactly, had the proctors learned about the explosion?

When the returning lawmen stepped through the saloon doorway, an anxious hush fell over the crowd. But the Dust Devils, still at the long table, glanced over at John and visibly relaxed.

Silver Davies turned toward Lilly Li, who was standing behind Lo Pan, kneading the enormous muscles in her husband's shoulders.

"Told you, Lil," Davies said smugly. "We won't be seeing any proctors in Sunstone tonight!"

"Is that true, Marshal?" various townspeople called out.

"Looks like it," John admitted. "You can go back to having a good time, but I suggest we all make it an early night."

As the room exploded into noise, John and Hangman worked their way to the long table. Their progress was slow because so many people insisted on shaking John's hand. No one offered a hand to Hangman. Dana, who'd been stacking dirty dishes in a wide container behind the bar, practically flew to the table.

"Pull up a chair, Kelly," John said, returning Dana's affectionate smile while seating himself, again at the head of the table.

"What happened, Johnny?" Lilly asked.

As he described the encounter, he was intrigued by the diversity of reactions the story produced. Chou Larker found the tale hilarious, laughing as rowdily as Bai or Brice over at the kid's table.

Coby Patterson's eyes were shining with something akin to hero worship; Dana looked proud but a bit worried; Lilly and Lo Pan seemed quietly pleased; Jacques appeared wary; Davies's eyelids fell to half-mast but the eyes themselves sparkled.

"Now," John said softly. "Where were we before the interruption?"

"I was asking," Davies replied, "why you're nervous about dueling an old man."

"You've never seen Bill in action, Dave."

"He was that fast?"

"That's not it, exactly. Lilly's probably faster than he ever was. But—I'm not sure the best way to explain this." John thought for a second. "Do any of you recall something called the Tejavana Annual?"

Jacques, Larker, and Lo Pan nodded; the others looked blank or uncertain.

"The Tejavana was a contest for law slingers. The last one took place twenty-five years ago."

"*Now* I remember," said Davies. "I was a little too young to join in the fun."

"It wasn't done for fun, Dave. The idea was to give everyone a ranking and set up a system to make the distribution of slingers among agencies fairer. The best Grand Marshals tended to collect the best slingers and some of the agencies were left with . . . sorry to put it this way, the dregs."

"Like poor Malachite?" Lilly asked.

"Just so, although I'm afraid Preston himself spent more of his life in gangs than in agencies."

Dana stirred. "What's important about this contest, Johnny?"

John, reliving old memories, barely heard the question. "You had to be fifteen to enter, so the first time I was in it was . . . twenty-eight years ago. That's

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

when I first met Henri."

"A fine day," Jacques confirmed.

"But for three years in a row I got to watch Caine perform. I swear he could do things you wouldn't believe."

"Such as?" Davies asked dubiously.

"There were ten different contests, some of which were quite clever. But one stood out. It was supposed to test your skills under the worst possible battle conditions.

"A team of agency engineers built this big crazy contraption they called 'Snake Eyes.' You'd climb a ladder to reach a bucket stuck on the end of a catapult arm; you'd climb inside and pull down the lid. Then three engineers would turn a crank and the bucket would start spinning. When you got spinning fast enough—which took a *long* time, I might add—someone would release a block and the catapult arm would jerk forward."

"Don't tell me Henri tried that!" Davies laughed and the dark-skinned giant shook his head like a dog shaking off water.

"Hardly, Dave," John responded. "They would've needed a bigger bucket. Now pay attention! The lid was tied loosely to the ladder and would get snatched off when the arm had moved halfway through its arc. The bucket would come to a sudden stop, but you wouldn't; you'd suddenly find yourself twenty feet up in midair, spinning fast enough to make a cyclone sick. And you were supposed to then shoot as many bullets as you could into four distant targets evenly spaced around the machine. If you didn't land on your feet, you'd lose points."

Davies swallowed hard. "Jesus, Johnny! I hope the people turning that crank were wearing hardball-proof armor!"

"No, but the instant the block was removed, everyone around would dive behind small bunkers." The corners of John's lips twitched upwards. "Come to think of it, Dave, I seem to recall that this particular contest didn't attract as many . . . onlookers as most."

"Did anyone ever *hit* a target?" Davies asked.

"Best I ever did was four bullets in three targets."

Lilly Li made a soft hissing sound and Davies produced a whistle.

"I'd say, offhand, that was damn good shooting, Johnny."

"Thanks, Dave. But that was my best run. The targets had six rings and I never got closer than ring four."

Only the slingers present understood the depth of John's achievement. Top slingers invariably have an athletic gift called "steady vision." A slinger can be running, jumping, or rolling and it won't impair their ability to visually track a moving object; their brain, as Davies once put it, "automatically adjusts for movements of the head it's housed in."

But the ability came at a price. Most slingers were susceptible to seasickness and became extremely queasy if they were spun around quickly and repeatedly.

John's eyes flashed golden as he sat up straighter in his chair. "Bill Caine," he said firmly, "was in the Snake Eyes competition, too. The first time he finished, I thought he'd done unbelievably well. All four targets were hit dead center. But then I got close to one of the targets and noticed something odd."

Larker appeared almost hypnotized. "What did you see, John?"

"The hole was too big. I was young then, and I figured that with all the spinning, somehow the *bullet* had been spinning when it hit. I asked one of the engineers about it. She looked at me as if I was flunking Idiocy 101, which I suppose I wasn't, but she gave me a quick lesson in ballistics and muzzle velocity."

"Caine had hit the same bull's-eye more than once," Davies whispered.

"He'd hit *every* bull's-eye three times. And he did that consistently for all three years I competed."

The waves of happy sound in the sa-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

loon seemed to crash, break, and die at the Dust Devil table.

John was still waiting for the story to fully sink in when Davies spoke up. "Still, boss, that was a long time ago."

"Nice thought, Dave, but I saw him in action today—so did you, right at the end. I wouldn't say that age has slowed him much. And that's not even considering those burns. Maybe, if he suddenly gained about seventy *years*, I'd have an even chance."

Dana brushed damp hair from her forehead. "But you have a plan?"

John grimaced. "My only 'plan,' if you can call it that, is for all of us to put our heads together and—"

"Ridiculous!" Larker hissed in exasperation. "Slinger Code or no, why fight fairly with ogres? The man is a murderer hundreds of times over; I suggest we see how he likes the Dirty Jake treatment himself. We'll find a nice comfy spot near Aurado for one or two of you ultra-sharpshooters to hide. And when he eventually rides by—"

Davies's face lit up. "First sensible idea I've heard all week! I volunteer."

John's expression scarcely seemed to change but Larker was suddenly exceedingly glad Tornado Carter wasn't his enemy.

"We can't do that, Chou," John said calmly. "Putting aside how repugnant I find the idea, there are too many Mudslingers. Give a big gang like that an excuse for a vendetta, and you're asking for wholesale killing. I won't have it."

Larker lowered his eyes briefly and let his breath out with a whooshing sound. "You're right, John. But, damn it! Jake's plans could affect everyone on our entire planet. Everyone! Maybe it's worth some—a lot of sacrifice to stop him. Don't you think there might be . . . circumstances when the ends really do justify the means?"

This classic question resonated inside John's mind with fresh and personal importance, echoing and reechoing. As John remained silent the Dust Devils began to sense that he was floundering in unexpected waters, but couldn't guess what kind of lifeline to throw.

Lo Pan was the exception; his eyes were closed and his face relaxed. He appeared to have fallen asleep until his huge head began turning slowly from side to side like a man trying to identify the source of a subtle noise.

Dimly, John noticed the giant's behavior and it shocked him into the here and now. When the Compass acted this way, trouble wasn't far off. But at least Joe wasn't sniffing. When Lo Pan Li started sniffing, a wise slinger reached for their guns. . . .

"Sorry, Chou," John said humbly. "Right now, I don't know if fair ends *ever* justify foul means, but we can't afford to act as if they do. We win the war if I win the duel—it's as simple and difficult as that. And dueling won't trigger any vendettas!"

I've already done enough things I can't forgive myself for, he thought.

He studied the faces studying him. "Our joint task, and I admit it's probably impossible, is to figure out how I'm supposed to beat a slinger who's stronger, faster, and more experienced."

Lilly Li chewed gently on her lower lip. She glanced worriedly at her husband but his eyes were open now and he was wearing his usual faint smile. She waited a long moment to let anyone with a suggestion speak first. Finally, she offered her own idea: "Maybe, Johnny, the right terrain might give some advantage?"

"Good thought, Lil! Caine is taller and heavier than I am; maybe we can somehow make that work for us. But before we plan any specific strategy, there are factors we need to consider."

"The jumping?" Davies asked softly.

"That's definitely a factor. Would you or Lil care to tell the group how Dirty Jake got away?"

Davies turned his hands upwards. "All I can describe is what I *think* I saw. You

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and Lil are welcome to tell me I was hallucinating. I'm hoping like hell I was hallucinating."

"Then we both were."

"And me," Lilly added.

Davies carefully smoothed the front of his shirt. "Like the boss said, Caine got away by, well, *jumping*, but you've never seen jumps like these, folks. Every one at least fifty feet long and maybe twelve feet high! I'm not exaggerating. But maybe the weirdest part was that the *curves* of the jumps weren't right. I kept shooting but he was never where he should have been. He wasn't moving . . . parabolically, if that's the right word. And he was zipping along faster than a jackrabbit. Even if he were ten times stronger and quicker than any slinger who ever lived, he shouldn't have been able to get enough *traction* to move like that."

Lilly nodded rapidly. "Also, he was wearing something strange."

"Smooth and shiny," John elaborated. He described Caine's metallic vest and backpack and then asked if anyone had ever heard of such a thing. To his surprise, Dana responded.

"When I visited Earth," she said cautiously, "Our tour guide took us to a game called 'Airball,' which was played in teams. I remember the players wearing special gear . . ."

"Vests that looked like polished silver?"

"Tight jackets, really. Our guide called them 'turnbuckers.' I wanted one because they were so pretty. Down on the field, the players did the craziest stunts: changing directions so fast you couldn't believe your eyes, leaping like giant frogs."

John nodded. "Sounds right. Did the guide say anything about how these turnbuckers work."

Dana sighed. "I couldn't follow what he said. Something about 'gravity reversions' or maybe 'recursions.' But I remember that the official name for the jackets had the word 'inertial' in it. Inertial something something. Does that help?"

"You're the engineer, Dave," John stated. "What do you think?"

"I think I've had the rotten luck to be born on a goddamn primitive planet, Johnny, and I sure would like to know a whole lot more about a whole lot. But maybe these devices affect Newton's Laws. I suppose they could use gravity to . . . modulate inertia or vise versa. I don't know. But for now, we'd better assume that as long as Caine is wearing that vest of his, he'll be able to out-leap and outrun you outrageously."

"Anything else?"

"Looks like we've got a possible explanation for how Caine could handle the recoil from that weapon of his, and maybe even how he survived the force of the explosion. I'm just speculating. But at least it seems the bastard can't actually *fly*. Unless—and wouldn't this put a pencil down your barrel!—he's got other cards up his sleeves."

John nodded. "Yeah. I have a feeling we haven't seen the bottom of his bag of tricks. Speaking of which, did anyone except Lilly get a good look at Caine's steed?"

"I did," said Lo Pan in his calm thick voice.

"No one else? Dana, does he usually ride something that looks like a huge kangaroo with fangs?"

Dana, Karen, and Larker silently shook their heads in surprised denial.

"I thought so; someone would've mentioned an animal that strange before now. So, Kelly, here's where I'm counting on you."

The pale slinger's lips thinned in something less than a smile. "I'm here to be counted on."

"Good. When Caine showed up and you were waiting in the hotel, could you hear the sounds his creature made?"

Hangman frowned. "Of course, and earlier when we were listening on the hill."

"Were those sounds the same ones

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

you heard coming from that barn you told us about, the barn where you thought Jake's gang was raising a new kind of animal?"

The Hangman grimaced. "Yes and no, Marshal. The noises were similar, but the cries and growls from the barn were deeper. Much deeper. If I had to bet, I'd bet the beast Caine was riding today was . . . immature, maybe even something of a baby."

"Buddha's balls," the sheriff sighed.

By consensus, the group separated shortly after that. Everyone except Karen Mueller was still sleep-deprived and John hoped some of the brilliant ideas he'd asked for (if there were any to be found) would start flowing after a full night's rest.

Dana closed the saloon early, John helping with the cleanup. They went upstairs together. Dana headed for the bathroom and turned on the shower. John removed his clothes, again placing his guns under the box springs, and gratefully slipped into bed. He realized, with considerable amazement, that he'd fallen asleep when Dana woke him getting into bed herself. Even then, he might well have slept through it, but she got into bed on *his* side. . . .

John was dreaming. Tiny monsters, miniature versions of Dirty Jake's horrific kangaroo, were hopping down Sunstone's Main Street in the thousands. They were snarling in nearly supersonic voices and their tiny teeth were dripping blood.

Oh hell, he thought within the dream. Something like this is sure to give me nightmares.

Then, without transition, he was back in slinger school during one of those days when he was scheduled for "self-image" work. The procedure had become boringly familiar: he would hurry from his advanced molecular genetics class to Dr. Frank's office where the Earth-born psychologist would inject him with a hypnotic agent. He would soon fall into a deep, induced sleep.

He understood that this would give the doctor a chance to talk directly with John's subconscious and remove any psychological blocks to the kind of performance a slinger should be capable of.

But John was already late for his appointment and he couldn't quite remember where Frank's office was. He wandered around for what felt like hours before he finally stumbled into the right room. The psychologist was furious at the delay and wielded the hypodermic as if it were an instrument of punishment. But this time the drug didn't take and John, afraid of making the doctor even angrier, faked being asleep.

The treatment was bizarre and unexpected. Dr. Frank didn't say a word, but placed an unfamiliar device over John's ears.

The sequence ended with a horrible high-pitched squeal. . . .

Which blended into the next dream: the one he'd had nearly every night since he was five. His three-year old brother, Stevie, was playing in the brook behind their old house. It was early summer and Happy Trails Territory was entering its annual dry season so the stream had only a modest volume of water.

Young Tornado, who was supposed to be keeping a sharp eye on his little brother, was on the banks, practicing quick-draws with his brand new three-quarter-size toy pistols. Every time he drew, he made a loud if poor imitation of a gunshot.

Shut up and watch Stevie, you stupid fool!

But the five-year-old couldn't hear a voice, however desperate, from thirty-eight years in the future.

Please, please . . .

"Johnny," Dana called softly as she reached over to put a warm hand on his arm. "What's the matter?"

His eyes snapped open. He was trembling and it took him a minute to re-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

member where he was and even longer for the tension to begin draining away.

"You were moaning in your sleep, dear."

"Just a bad dream, Dana. Well . . . more like a bad memory."

"Will you tell me about it?"

He let his breath out in a slow, shaky sigh and put his hand over hers. "Maybe I should. I've been keeping this penned up . . . for a while now. Remember when you asked me earlier if my parents were rich?"

"Yes."

John sat up, leaning his back against the headboard. "Both my parents were marshals and they weren't rich. They'd always planned on having children—three, to be exact—but, naturally, they wanted their kids to be top slingers like them. They saved every dollar they could for years and years. Unfortunately, their agency was quite large and by the time they'd divvied up money from a given job, there wasn't much for their own pockets. The day came when it finally dawned on them that they were going to get old before they had enough to pay for even *two* slinger-level enhancements. So they decided it would be better to start the family and give the first-born, me, all the genetic advantages. And then just go ahead and have two normal kids."

John sat very still for a moment before continuing and Dana could see his throat muscles working as if the next words were stuck.

"They spent almost everything on me and only the minimal on my little brother, Steven, who was born two years later."

"I'm beginning to see," she said gently.

"There's more. Sometimes my parents would have to rush off because of some emergency. When that happened I had an Aunt who would take care of Stevie and me while they were gone. Only . . . someone had to let my Aunt know she was needed and even then she couldn't always come out to the house instantly so I'd be in charge of my brother until she showed up."

Dana heard how young and fragile John's voice had become and felt a rush of tenderness. "How old were you when you first had to be so responsible?"

"I think it started when I was four. I was supposed to be mature for my age."

"Johnny, I don't want to judge your parents, but I don't think any four-year old should be—"

"I know, I know. But they couldn't help it. They couldn't afford live-in help; they'd spent all their extra money on *me*."

"Okay. What happened that's left you feeling so bad?"

"My family lived near Oakley, just outside Happy Trails Forest."

"Where they grow the stone-maples?"

"Yes. Even now, it's a thinly populated area. Dana, I was five when my brother died. It was my fault. My parents had to leave suddenly and they ordered us to stay inside until Aunt Jean showed up. But it was the kind of summer day that makes the indoors feel like prison and my Aunt was taking forever to appear. So we wandered outside. Stevie climbed down into the streambed behind our house while I was fooling around on the banks."

"Yes?"

"During rainy season, that stream is a terror, water rushes down like an avalanche and it even rumbles like an one. But this was early summer and the water was shallow and lazy. I didn't think Stevie was in any danger."

Dana was appalled at the pain in John's voice. "You were only five."

"So what? I was supposed to be in charge, damn it! I didn't hear anything, Dana, because I was playing slinger, drawing toy guns and shouting 'bang.' My God! Finally, I looked down the embankment and saw—my brother was lying face down in a little pool, no more than six inches deep. I jumped down to pull him out and—" John's arms were

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

shaking again and Dana sat up and pressed her side tightly against his. "Stevie's head was turned a little sideways underwater and I could see something translucent coming out of his mouth, suspended in the water. Something *foamy*. It was like he'd been crying for help and the cries had turned into something . . . solid. Sometimes in my dreams I can almost hear what he was trying to say."

Tears had turned Dana's eyes glossy, but John was a tight bundle of misery, seeing nothing but his brother's drowned body.

"I didn't know what to do. I pulled him out but no one had taught me anything about . . . resuscitation. Aunt Jean showed up a few minutes later but Stevie was already dead. Apparently, he'd slipped and hit his head on a rock. I hadn't heard anything because of all the noise I was making."

"And you've never forgiven yourself after all these years?"

John put his arm around her shoulders and pulled her even closer. "I can't. Or maybe I can't afford to. Sometimes that mistake has been the only thing keeping me going, keeping me doing work that I'm not really suited for, but that I know is so necessary. And there's another thing I have to blame myself for."

"What's that?"

"My parents never did have that third child. *They* never blamed or punished me, just themselves. But they couldn't get past Stevie's death either."

"Your parents," Dana said gingerly. "I take it your parents were Bret and Elizabeth Barrett? 'Sage' and Beth?"

John turned and stared at her expressionlessly. "Lord above, Dana! Have I become some kind of . . . open cylinder lately and everybody can just look inside?"

She shook her head slightly. "I knew the Barretts were particularly important to you because when Chou mentioned them downstairs, your face went all blank. Like now."

"Damn. Well, you're right. Carter is my mother's maiden name; I've never wanted to cash in on the, um, family reputation."

Dana nodded understandingly. "I would've done the same thing. But, getting back to your being an open cylinder, I think you *are* getting easier to understand. When I first saw you, dear, you looked like someone trying to bluff his way out of a bad poker hand."

"And now?"

"You look more honest, more open. Softer. When you're feeling something strongly, it shows. I like that. Come here. I don't know if you need to be close to me, but right now, I need to be close to you."

He woke up once more, hours before sunrise, in an icy sweat. But it wasn't from a dream. That small inner voice nagging him, whispering that he was neglecting something crucial, was no longer small. It was screaming.

Yesterday morning, Caine had said something short and ominous before setting off the fireworks. The explosion and its appalling aftermath had blasted the remark from John's conscious thoughts. Until now.

Caine, with his uncanny knack for speed-reading people, had seen at a glance that John knew his secret. Aware of his former protégé's limitations, the outlaw had immediately put the blame on Chief Krishna. And like a fool, John thought, I didn't even *try* to deny it!

Then Caine had said, "I'm going to have to adjust my plans to fit."

Dear Lord! Dirty Jake had good reason to fear Shining Wing! In the "cowboy" world, public trust went to the individual with the shiniest reputation—a psychological quirk of slinger culture. But among the tribes, an Indian Chief's word was unquestioned. Chief Krishna could speak the truth about Dirty Jake and Paladin's Indians would believe. And that would do it: Caine could never

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

become Paladin's secret leader without Tribal approval. John was deeply afraid for Shining Wing and his Anasazi.

They weren't the only ones at risk. John had told Davies that publicity couldn't do more than slow Caine down. Dark second thoughts were festering this morning. Remembering the outlaw's demeanor, John doubted Caine would accept even a *chance* of being slowed down. By now, he'd probably set up a Mudslinger blockade to keep Equus Express messengers out of town and to . . . discourage local citizens from making long trips. John had better warn Karen not to go off to her Monday class. . . .

A blockade would be useless on the Indian side of the Paladin equation. The tribes had powerful long-distance communication techniques such as smoke-signals. If Indian Scouts truly existed, ten thousand Mudslingers couldn't stop them.

Caine needed to do something drastic. Soon. The Anasazi had to be in immediate danger. And for another reason: they were at greater risk than the people of Sunstone. Dust Devils weren't protecting the Anasazi.

John's knew he should fetch Houston and gallop up to New Nokai Dome immediately. But he hesitated. That trail, according to Larker, was steep and treacherous in the dark. Houston had some surprising abilities in hilly terrain, but being sure-footed at night wasn't among them. While John's own night vision was excellent, he couldn't spend the entire ride watching where Houston put his feet. Also, John would have to wake Dana up, which he hated to do, to make sure there wasn't more to locating the Indians than simply riding northwest. And surely, Caine was far too injured to take action against the Indians quite yet. Besides—

He never finished the excuses; too many days with too little sleep. Exhaustion grabbed him and silently shoved him back into the murky ocean of dreams.

Chapter 17

John's eyes slowly opened to the cool gray light of morning. An uneven tapping against the roof and the outside wall told him that rain, mixed with hail, was slanting in from the east. Winter was moving in with all its luggage and the skies would soon get clearer and a whole lot colder. John turned his head and smiled at the warm, sleeping form snuggled against him.

Then he remembered his insight about the Anasazis and his eyes and mouth gaped wide.

Hasn't your life taught you *anything*? he asked himself in a cold fury. How irresponsible can one person be? What are you going to do if it's already too late to save these people?

Smoothly and gently, he pulled the covers back and eased himself away from Dana and out of bed. The room had cooled in the night. Goosebumps erupted on his bare skin.

"Where you goin'?" Dana muttered.

"Sorry, didn't mean to wake you. I've got to make a quick trip. Go back to sleep."

"Quick trip to where?"

"To see Chief Krishna."

"Oh?" She pushed herself up on one elbow. "Then I'll make you some breakfast," she said, yawning while she glanced at her clock.

"I'd love that, darling, but I can't afford the time. This may be urgent."

Now she sat up all the way and gazed at him worriedly. The pale light through her curtains made her body glow softly like a smooth ivory sculpture. "Get ready and I'll pack you something to eat on the way."

"I'd appreciate that."

"Know how to get there?"

"Shining Wing said to follow the trail northwest into the hills."

"Turn left when you come to two big boulders carved with Anasazi runes. Take that path rather than the main one;

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

it's a shortcut."

"Thanks, I'll remember."

John used the bathroom hastily, threw on his clothes, strapped his Colts on but decided to leave the "Lumbar Luger" under the bed. He wanted Houston to be able to move as quickly as possible and every pound counted. He practically ran downstairs. Dana, wearing her bathrobe, had also worked quickly. She silently handed him a small, covered basket that felt warm. Then she hurried to unlock the saloon doors.

As they stepped through the doors side-by-side, John was thinking he'd give Dana a quick kiss and then run to get Houston. But his plans changed. Lo Pan was standing like some animated mountain in the street outside the saloon and he not only had Houston waiting and saddled, he'd also brought along Pang, Joe's modified elephant. Both animals were facing John, both angled their heads to one side to get a better look as he rushed forward to put the basket in the zebra's nearer saddlebag. Houston made a soft, welcoming whinny; and Pang, who was also saddled, reached out with her full-size trunk and nuzzled John's ear. The zebra, disliking the familiarity, gave Pang a warning nudge.

Sunstone had an oddly festive look this morning. Colorful, wax-impregnated tarps were hanging strategically over areas scheduled for repainting.

Lilly Li, shivering a little, was waiting near her husband; she hadn't brought her giraffe. Across the street, peering down from the hotel roof, Silver Davies gave John and Dana a casual salute. Davies had a huge coil of rope slung over one shoulder with the fuzzy look of "parachute line."

John wasn't startled to see Houston—he'd worked with Joe too long to do that—but he was taken aback by Pang's presence. He opened his mouth to ask the calm giant about this when Lo Pan suddenly closed his eyes and began sniffing the air uncertainly.

From past conditioning, John felt a surge of adrenaline as his body went into full battle alert. He tried to urge Dana back inside the saloon with a brusque arm-gesture. Then, on one heel, he spun around twice while his eyes strained to grasp every little detail.

In the past, Joe's warning sniffs had invariably indicated serious and immediate trouble. But no danger was visible.

Lilly stood poised, her delicate hands lightly touching the handles of her mismatched guns. Davies, balanced on the peak of the hotel's sharply slanted roof, risked a nasty fall by jumping high and rotating his body 360 degrees in midair to see a little bit farther in all directions. He landed safely, tried to repeat the trick, but slipped on the wet shingles and began sliding down the slope. More embarrassed than alarmed, he saved himself by grabbing an edge of flashing.

He carefully worked his way back up to the ridge and again looked around for signs of trouble, this time without jumping, before he glanced down to see if John or Lilly had noticed his clumsy moment, but both were currently staring at Lo Pan.

John had reason to stare. He'd never seen Joe act quite like this, shaking his huge head between sets of three or four fast sniffs. The behavior reminded him, unreasonably, of some wine connoisseur from Dark Nevada clearing the palate between tastes.

"How bad is it, Joe?" he asked softly. "And where is it coming from."

The giant opened his eyes. "These matters," he said contritely, "remain unclear."

John lifted a beckoning finger toward Davies who made a final surveillance, shrugged, and got down from the roof using a technique called "Magee's chute," which only worked with lighter slingers. He pulled the coiled rope off his shoulder, whirled it around, and threw it upwards with all his enhanced strength while keeping a firm grip on one end. It hissed as it extended to its impressive full length. Meanwhile

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Davies was running down the slope like some maniac trying to fly a kite. At the roof-edge, he leaped. The special braiding, with its countless loose threads, provided enough drag to allow him a reasonably safe, although hardly soft, landing. The easterly breeze had carried him neatly across the street.

He'd lost his hat. His hair was mussed. His clothes were wet and wrinkled from his brief stint as a human toboggan, which had in fact given both John and Lilly a scare. The fact that the elegant slinger seemed oblivious to these things showed how seriously Davies took Joe's warnings.

"Want me to roust Henri, boss?"

John nodded. "And Walsh. I don't know what's going on here but we'll be better off facing it together."

Davies ran toward the hotel doors.

"How bad it is?" John repeated, turning back to the giant.

Lo Pan was standing very still. "The waves rise and fall. One wave may soon fall and only rise in a new form."

These oblique words sent a cold shock through John's body. He looked over at Dana who hadn't, as he'd wished, moved inside.

"Who is in danger, Joe?"

"Alas, I am no suan ming zhe."

John knew the phrase meant "fortune-teller." "I know. I'm sorry, Joe. I'm always expecting the world of you. But we've got to make sure everyone is protected."

Lo Pan's gazed down at John with a trace of wistfulness. "A being can have a thousand eyes, my dear friend, yet it is the one spot they fail to watch where the arrow will strike. I must accompany you this day."

"No! You can't do that. Do you even know where I'm going?"

The giant chuckled. "My belly never asks my head for a destination, it just follows."

"Look, Joe. I'm heading up to New Nokai Dome and I have to move fast. Pang is quick enough on level ground, but there's no way he can keep up with Houston in the hills."

"Then I must follow in my own way."

"Damn it! I need you *here*, to help guard . . . everybody."

Lo Pan nodded sympathetically. "I know your heart, but how can I ignore mine and find a balance?" He closed his eyes briefly. "The loss may be greatest if I fail to go."

"All right, all right. I don't know why I'm bothering, but this one time I'm *ordering* you to carry a gun!"

"I am not strong enough to carry a gun."

John groaned internally, but he'd lost that argument years ago. "Lord above, I hope you know what you're doing. I hope I know what *I'm* doing. Lil, when everybody gets out here, get someone back on that roof pronto and put watchers on both ends of town. Use townspeople as sentries. I want you, Dave, and Henri available at a moment's notice for wherever you're most needed."

"Certainly, Johnny."

"Thanks. Also, make sure everyone in Sunstone gets warned not to leave town. I think Dirty Jake may want to keep his . . . spilled secrets contained."

Lilly's dark eyes widened. "Rely on me."

"Don't I always? Dana—I'll be back as soon as I can. Tell Chou where I went."

"Of course, Johnny. You be careful."

"You too." John squeezed Joe's forearm, kissed Lilly, kissed Dana, waved to Davies who was just emerging from the hotel, vaulted onto Houston's back and headed north at a fast trot. Behind him, Lo Pan said farewell to his wife and even John's sensitive ears couldn't quite pick up her murmuring reply. But her voice wasn't so faint that he missed the small quaver of fear.

When John was sure his steed had warmed up, he urged Houston into an easy canter. With his enhanced endurance, the zebra could move at a gallop for a considerable time, but John

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

wanted Houston to have plenty of reserves for the long climb ahead. The road was already sloping gradually upwards.

Cai Hong Creek ran parallel to their path for several miles then sneakily curved to bar the way. John crossed over on a sturdy but neglected-looking covered bridge, weather-stripped to bare wood. The original red paint only showed in small crevices and gaps between beams. The wind had shifted. While precipitation was diminishing, it was now mostly hail. John was grateful for the bridge's tarred roof for those few seconds he was under it.

He was on edge, worried about the Anasazi and nervous about a possible ambush. Outlaws could easily be hidden somewhere . . . watching.

The road began easing westward as the elevation increased. The cold wind sharpened and he had to pull down the straps tucked inside his hat and tie them under his chin. He turned in the saddle to see if he could catch a glimpse of Sunstone from this height.

He could only see a few rooftops, but that was enough to give John a twinge of heart. So much of what was most precious to him was concentrated in such a tiny place. An Earth cliché, linguistic refugee from an alien way of life, occurred to him: I've got all my eggs in one basket.

But one of the eggs had escaped. A moving dot about a mile behind him had to be Lo Pan; John was sorely tempted to wait until the giant had caught up. He sure could use Joe's advice—

Then he remembered his similar rationalizations in the dead of night. He'd actually convinced himself that he might need *directions* to find the Anasazi, despite the fact that Shining Wing had already given him directions. What kind of moral infirmity had made him fall back asleep?

Sighing, John urged Houston to speed up, and began posting to make it easier for the zebra to run. John was skilled at this, lifting his torso off the saddle and using his thigh muscles to keep his body moving on an even plane while Houston was bouncing up and down.

The road began to rise more swiftly as if eager to reach the hills.

Here, to his right, was a long fence and behind it a large abandoned farm. A private road passing through open wooden gates was partially washed out. The gates were framed with two tall wooden uprights connected by a crosspiece, and hanging by chains from the crosspiece was a wrought iron sign displaying three symbols. One suggested the outline of a hunched-over man playing a horn or perhaps a flute, another was a simple spiral, and the third was the standard rectangle-within-a-rectangle—the Tenderfoot glyph for "corral." A big, sprawling ranch house was set on a hill a few hundred yards away.

John guessed that he was passing Dana's family ranch, the Nokai Corral she'd mentioned. Where her father had slipped and fallen to his death. Looking over the fence, he noticed some huge boulders far back on the property and shook his head sadly.

The mountains ahead were clearly visible now. Scattered, low-hanging clouds were draping ragged shawls of fog over the upper heights.

And the terrain was developing a very different and uneven character. The ground began to look as if it had been frozen in the midst of a rolling boil. Houston was soon weaving between large, rounded hillocks or equally large sinkholes, and the rising pathway sometimes fell off sharply to one side or another, occasionally revealing impressive vistas. John stopped posting. Each time he looked down, the valley's overall reddish hue was increasingly blue-tinged and fog-blurred.

"Maybe they should have named it '*Purple* Clay County,' he muttered at one point. The road had become a narrow trail but was well-kept and slightly tilted to assist drainage.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

One of Houston's hidden talents began to pay off as John found opportunities to bypass entire loops of trail by going up improbably steep embankments, or having the zebra ascend by jumping from boulder to boulder like a mountain goat.

In fact, Houston *was* part mountain goat; only sixty percent of the animal's genetic makeup was zebra.

John's actions and decisions became almost mechanical as he became less concerned about a possible ambush. His mind oscillated between thinking warm thoughts about Dana, worrying about the future of their perhaps too-hasty alliance, and wrestling with his foreboding about the upcoming duel with Caine. He only fully returned to his senses when the trail widened between two enormous rocks, each displaying the same five symbols.

Two of these symbols had decorated the Nokai Corral's front gates: the spiral and the horn-playing musician. A third carving suggested a handprint. The final two were standard Paladin glyphs: a Sanskrit "Aum" and the classic emblem of Judaism: an open book, the Torah.

Past these boulders, the road forked, the smaller and steeper branch bearing left.

"Dana told me about this place," John said quietly. "What do you think, Houston? Should we ignore her advice and keep going straight?" The zebra shook his head at John's questioning tone.

"I agree. Left it is!"

Random flakes of snow were still drifting down but the hail had almost stopped. Thin rivulets of water crossing the path were half-frozen. Houston's breath plumed exuberantly in the crisp air as he easily trotted up the slope, the drumming of his hoofs echoing throughout the hills.

"It won't be long now, old friend," John said encouragingly and the zebra gave his golden mane a little shake.

John was alert now; otherwise, he might have missed the initial warning signs. As Houston leaped over a wide patch of ice, the animal took to turning his narrow head very slightly from side to side. A subtle whistling harmonic became audible in his breathing.

"Smelling trouble ahead?" John asked softly. "Lord, how I wish you could talk."

The next half-mile was uneventful, but this wasn't reassuring. Houston was acting increasingly spooked and his rider was feeling rather spooked himself from trying to imagine anything frightening enough to upset the battle-hardened zebra. John packed his hat away so that nothing obstructed his vision. He rode with reins held in one hand and a gun, hammer cocked, held in the other. Pre-cocking wasn't necessary with a double-action pistol. But it could save a few, possibly vital, milliseconds in firing.

—The trail zigzagged up to a broad, nearly level plateau sparsely punctuated with upthrust slabs of black-flecked granite. It looked like a dead end. John, trusting Dana's instructions, assumed that the trail continued behind some tall ridges a few hundred yards ahead. But confirmation would have to wait. Houston had reached the plateau, taken three steps, and stopped dead, trembling. John was baffled; he'd never seen his steed so afraid.

Yet, for a few more eerie seconds, there was no apparent threat. Then, one by one, seven threats emerged from behind the tallest rocks. John felt his skin crawl, perhaps trying to thicken into armor.

He could almost hear his suddenly thunderous heart pounding out words: "run-run, run-run, run-run . . ." But running could be a terminal mistake. The flock of monsters staring at him so coldly had the biggest, strongest looking legs he'd ever seen.

He recognized the species. But Dirty Jake's giant kangaroo was apparently the baby version—or maybe a prototype. The smallest beast, considerably shorter than some of its fellows, was easily

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

twelve feet tall.

What were they doing here?

John's training finally asserted itself. Shoving panic aside, he assessed his new playmates for weaknesses. He noted several variations, aside from sheer size, between these creatures and Caine's steed. Their arms were proportionally smaller and more curved, the legs much larger, and the inward-curving teeth longer. Their eyes, set farther forward than on a natural kangaroo, were glossy, featureless, and grotesquely protuberant. While their bodies came equipped with abundant reddish fur, they seemed to be molting. Bald patches revealed skin as bumpy and reticulated as an alligator's. An errant breeze carried a sour stink to John's nostrils.

None of these unpleasant features suggested any weak points.

And John didn't like the way the animals were behaving. They didn't immediately attack. Instead, they displayed an alarming cunning, spreading out to make a wide semicircle around Houston. Almost furtively, the beast at each end of the platoon split off and hopped toward the plateau's rim. John was startled and none too happy when the pair simultaneously jumped off the edge and vanished from sight.

On the way up, he'd noticed a series of ledges on the steep hillside to either side of the trail. Possibly, the absent beasts could use them to reach the trail and sneak up from behind. Or perhaps they merely intended to block off an easy escape route. Either case meant little hope for retreat.

John wrapped the reins loosely around his saddle horn, murmured something he hoped would sound soothing to Houston, drew his other gun, and cocked it.

He stared up at the bulging eyes staring down at him. Those malevolent orbs seemed like his best bet and there was no time like now. . . .

He fired off three quick rounds and then, in disbelief, wasted a fourth bullet. All four had hit a different monster squarely in one eye . . . and bounced off.

"Damn it," John groaned in frustration and pain. Those recoils had *hurt*! His hands were tender beneath the temporary skin. "Houston, we're in trouble!"

Should've known those weren't eyes, he told himself angrily. But what the hell are they? Goggles?

All at once, the creatures he'd hit were roaring, shaking their heads, looking less like disciplined soldiers and more like furious predators. Apparently, he'd done some damage after all. Blood seeped thickly from around the "goggles"; even a glancing .45 caliber blow wasn't trivial.

He had to plan his next moves with absolute care. Because of his bad judgment, the situation had just gotten considerably worse. He doubted he'd get a chance to reload. Therefore, he had only eight bullets to work with. Eight bullets, seven giant monsters. In a perfect galaxy, he could afford one more mistake. But then, such creatures wouldn't exist in a perfect galaxy. If, as he suspected, they were partially or largely reptilian, they might be exceedingly tough. If he weren't so busy, he would have kicked himself for leaving his backpack-gun in Sunstone.

He had to kill each animal with a single bullet and he could only guess at the monsters' anatomies.

Three of the beasts were easing in with ominously short hops and John desperately worked to visualize their skulls beneath skin and muscles. The bone protecting their brains was undoubtedly extra-thick; Caine would've seen to that. But weight was a factor; too much bone would make such large heads unwieldy. That's why large dinosaurs had needed fenestrae, those gaping "windows" in their extinct skulls.

Were these things built like, say, Allosaurus? Their teeth certainly weren't the wedge-shaped incisors of a kangaroo. The key here was destroying the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

brain. Unless the animals held their heads just so, shooting into their nostrils wouldn't work. If he were Carnosaur-hunting this morning, he'd aim for a maxillary fenestra, beside the nostrils.

What if the behemoths had kangaroo-style skulls with tiny openings. . . ?

Right or wrong, he had to decide right now and maxillary fenestrae seemed the best targets . . . assuming they were there. John mentally marked spots on the great heads smaller than a Dark Nevada dime.

With exquisite, terrifying, but wasted stealth, the three closest animals slowly leaned forward, lowered their heads, and extended their necks. The heavily fanged mouths opened while their long, muscular tails rose up to act as a counterbalance. Each beast settled slightly on its massive legs and John sensed the increasing tension as they prepared to spring.

Now, or in some other lifetime, he thought. Houston was shivering beneath him. . . .

"Go!" he shouted, tightening his legs against the zebra's sides while he fired off three rounds. Houston didn't need coaxing; he took off so quickly that John was nearly thrown. Three sprays of bright blood showered the area where the zebra had been standing, and the three attacking beasts, their heads briefly knocked backwards from the impacts, bellowed fearful screams that shook the hills. Then, almost in tandem, they fell face forward onto the reddened ground and lay twitching, releasing hot fluids and appalling stenches.

John only felt a kind of numb terror.

For the first time, he caught a glimpse of the back of the monsters' heads. All three were outfitted with some kind of metallic device or ornament—a mystery he had no time to consider. The two creatures that had left the scene earlier were back. They were together, near the rim to John's left, and were coming fast. From the other side and closer, the final two monsters were also giving chase in forty-foot jumps. This pair was an immediate threat.

John turned in the saddle and fired twice. But in a tour de force of bad timing, Houston had stumbled for a heart stopping split-second. Both bullets missed.

The result was too devastating to even swear at. Now John had four enemies to deal with and three rounds. Crazy ideas of somehow killing several beasts with a single bullet swirled through his racing mind. No, he was going to *have* to find time to reload.

But there wasn't any time left. John realized that with their next leap, the huge animals would be landing directly on top of Houston. He had no choice but to aim as carefully as he could and squeeze off two more rounds. One of the beasts fell forward immediately, skidding on the cold dirt, but the other somehow managed to leap high in the air even though John was sure it was, in effect, already dead.

John and Houston were about to be crushed. There was no sane way out of this so the only choice was to do something crazy. Using Houston's back as a platform, John stood up and jumped with all his strength, feet forward, towards the still-rising immense shape, hoping to alter the monster's trajectory just enough so that Houston could escape.

He hit the thing squarely in the chest and pushed off with everything he had, but it felt like hitting a moving mountain. John went sailing backwards, far over Houston's head, and he watched from above as the zebra made a last, desperate leap forward.

For an instant, John's heart leaped too because it looked, from his position, as if Houston would get away. But the zebra's left hind leg was a few inches too far back when the monster came down. The massive, fanged head struck like a spiked sledgehammer, obliterating Houston's leg as thoroughly as an explosion. The zebra was knocked flat with

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the crushed leg pinned under the dead monster's head.

For the first time in decades John landed badly, hitting hard and rolling helplessly on the ground for a dozen yards. The collision knocked his breath away and left his back in hot agony. He fought to take in air and get a leash on his emotions.

The two final monsters had stopped and were looking back and forth between John and the hurt zebra as if uncertain whom to eat first. At that moment, the creature lying on Houston went into convulsions. It thrashed around grotesquely, finally rolling completely off the zebra's leg.

And John shouted wordlessly in astonishment and joy when his steed suddenly hoisted himself up and stood shakily on three legs.

Galvanized by hope, John realized that he wasn't finished doing deranged stunts for the day. He had one bullet, a badly injured friend, and two monsters to deal with.

Although he could barely breathe, he began running towards his zebra, a bit surprised to discover that he was still carrying a gun in each hand; one was empty; but what the hell, maybe he could throw it down an appropriate gullet.

One of the beasts watched John's approach with interest but the other made a stupendous leap to stand just a few feet from Houston. It then leaned over to sniff the air almost delicately. The zebra stood still.

John tried desperately to run even faster; his angle was wrong for shooting. But he wasn't fast enough. With a low-pitched snarl, the monster opened its mouth incredibly wide and lowered its fangs toward Houston's back.

Without warning, the zebra threw his weight forward onto his two front legs and kicked up and backwards with his one good rear leg. Zebra kicks have been known to kill full-grown lions on occasion and Houston's timing was perfect. The hoof smashed hard into the monster's jaw, rocking the immense head backwards and knocking a fang loose.

But William Caine's pets were far larger than even the most radically enhanced lion on Paladin. The beast shrieked, shook its head, spat out the loose tooth, and reached down with its clawed arms to grab its prey firmly. John could see, with the slow-motion vision his parents had paid so dearly for, the terrible claws sinking in and Houston's blood welling up.

The sight was an intolerable lightning-bolt burning his soul. His body surpassed itself in a burst of speed that would have amazed even Lilly Li. He fired the instant he was in range and his last bullet appeared to hit with the additional force of his fear and anger. The monster, its muzzle nearly cracked in half, an appalling river of gore flowing from the gaping hole, pulled its claws from Houston's back and reared up to its full height. It stared down accusingly at John for a moment and then collapsed, barely missing the zebra's already ruined leg.

John turned to the surviving monster. This one was at least sixteen feet tall. The only hope for Houston now was to get this thing chasing him and somehow reload on the run.

The first part of the plan was easy. Without any prompting on John's part, the beast began leaping towards him and he had to quickly leap backwards himself to avoid being crushed. As the monster leaned down to bite John's head off, the slinger threw himself to the ground and rolled. He came up running, heading away from Houston and towards a possible refuge: an isolated granite spar over twenty-five feet high.

I'm smaller than King Kangaroo, he told himself grimly; I *should* be more agile.

A tremendous thump from far too close behind shook his fragile confidence. Agility alone wasn't going to save

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

him today. His pursuer could cover territory a whole lot faster than he could. A horrible stench fouled the clean mountain air—potently fecal, with an undertone of rotting meat—and he glanced back to see how close the monster was. He found himself looking right down its open throat and he realized, to his shock, that the beast was *running* behind him; he'd assumed that it could only move in hops. Fear gave him another adrenaline burst of extra speed and as the jaws behind him again rushed in for the kill, he darted as sharply left as momentum permitted. But the creature was too near for a clean escape. The jaws closed, painfully gouging several inches of skin on his back and snapping his gun-belt in half.

In a detached corner of his mind, he realized how lucky he'd just been. If those fangs hadn't caught the thick leather just right to cut through it, he'd already be dangling from those terrible teeth by his own belt. . . .

His destination was only thirty yards away but his legs seemed to be moving in slow motion. His mind was at full gallop. He debated running directly at the rock and then dashing aside at the last instant. Maybe his pursuer wouldn't be able to stop in time and would crash.

If that plan didn't work, the monster would wind up between him and this rock while he'd be lethally far away from the next one.

His other choice was equally bleak: he could run straight up the granite the way he'd run up the hotel wall in Sunstone and God help him if he slipped. But the hunter was too close now. With its jumping ability, it would surely have John in its mouth before he could reach the top.

He had to do *something*.

He decided to run up the rock and hope for the unlikely best. But when he'd taken four quick steps up the nearly vertical wall, he found himself instinctively pushing up and backwards as if his body had formed a plan of its own. He spun and flipped in midair. For one nasty instant, he was horizontal, smelling the beast's hideous breath, looking straight down into its enormous open mouth. He landed with a painful jar on the back of the monster's neck. He dropped a gun and used the free hand to grab onto a handful of auburn fur and hold on for all he was worth.

For a long, incredible moment, the beast stood still and silent except for its harsh panting. John had time to appreciate the powerful and unique aroma of its body, part rancid mammal, part rank lizard. Then it began snarling while twisting its head around from side to side, straining to get hold of any piece of its terrified rider. Fortunately, few creatures can get their mouths anywhere near the back of their own necks. . . .

"What now?" John asked out loud and the sound of his voice drove the beast into a greater fury. It spun around and around, trying to grab him with its clawed arms, which proved too short to reach. Next, it threw its head back repeatedly, attempting to crush him with the back of its skull. But its neck was insufficiently flexible and John kept his body as close to his enemy's body as possible. This beast also had one of the thin, circular metallic objects stuck on the back of its head. John had a close-up view of the thing, but he couldn't imagine what it was.

The next instant, the beast became a marsupial bucking bronco, shaking its body ferociously, leaping and twisting. John gritted his teeth. Just as he decided he'd damn well better ditch his other gun, the monster stopped abruptly. It had frozen in place bent far over in its attack position, giving John the incongruous impression of an old, stooped man weighing options.

Eventually, John thought unhappily, it's going to think of scraping me off against something or take to rolling on the ground and our little game will be over.

An idea for getting out of this predica-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ment occurred to him, but it was so outrageous and had so little chance of succeeding that he felt almost a sense of betrayal when he suddenly realized that he was going to try it.

First, he threw his one remaining gun far upwards to land, he hoped, on the small, flat pinnacle of the nearby rock. Then, in one quick burst and using mangy fur as a rope, he pulled himself hand over hand to the top of the creature's head. Half-squatting, he grabbed a kangaroo-like ear in each hand for something to hang onto and to discourage head shaking. This was a far more vulnerable position to be in than before and he was prepared, even eager, to jump back to the previous spot if the beast didn't react as he thought it might.

But it did. It immediately stood up to its full height in astonishment and John used that height and the momentum from the sudden rise to make the greatest leap of his life. His torso banged hard into the rock close to its summit and his scrabbling hands, at the last moment, latched on to some little ridges along the crest. He felt around with his feet, but found nothing useful. So with his arms alone he began pulling himself up and over the edge. He heard a brittle sound, like glass cracking, and then a much louder crack as the miniature ridge under his right hand broke off.

Now he was dangling by his left arm. He reached up but couldn't locate another purchase for his right hand. Beneath him, the monster had apparently realized where he was and emitted a roar so extreme that John almost let go. Using one arm and all his slinger speed and strength, he pulled himself upwards again so hard and fast that he came dangerously close to sliding over the far rim of the narrow summit. He heard and smelled jaws snap shut just beneath his feet.

The disappointed beast roared even louder and jumped up repeatedly trying to get to the morsel just out of reach, but the height and shape of the rock made this impossible. Seeing he was temporarily safe and breathing a disbelieving sigh of plain relief, John retrieved his gun and reached down to grab some bullets from his gun-belt.

Then he remembered that he no longer had his gun-belt.

Chapter 18

John could see the entire plateau from his new elevation but all he cared about was Houston, who seemed surprisingly far away. The stallion was still standing on three shaky legs, but not even trying to walk. He'd already lost a horrifying amount of blood, which was spreading across the ground like a gory shadow, and his striped head was hanging down as if acknowledging defeat. He looked small and helpless from this height and John felt torn in half at seeing his loyal friend in such pain.

This is one bad situation, he admitted to himself bitterly as he adjusted to still being alive. He couldn't do a thing for Houston. In fact, he was stuck up here as long as King Kangaroo was waiting. The narrow rock was barren of such niceties as heavy rocks, or pebbles for that matter, so there wasn't a damn thing except his gun and his boots that he could throw at his adversary.

Currently, that adversary was hopping in slow circles around John's refuge, looking up hungrily at the man looking down. Then, unexpectedly, the beast spun around and bounded away from the rock. John suddenly realized the terrible flaw in his improvised escape plan: the carnivore could get to Houston long before he could.

With no plan at all in mind, John jumped down from his perch, abusing his gun unprofessionally by dragging its barrel against the vertical stony face to slow his fall. Perhaps he landed hard. He didn't notice because he was already sprinting with ferocious urgency toward the bounding, retreating back.

He couldn't begin to catch up. In desperation, John hurled his Colt at the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

monster's head. His aim was good, but the beast paid no attention to the minor indignity and likewise ignored John's hoarse shouts and pleas.

Houston didn't seem to notice the approach of the gigantic carnivore. But at the last second, just as his fast-moving attacker got within biting range, the zebra jumped sideways. It was a pitiful jump, far below Houston's usual standards, but it surprised the predator. The monster overshot its prey by a dozen yards before it could reverse direction.

That was the delay John needed. But what could he do with it? All he could think of was to keep running toward the enemy and try to get it chasing him again. He doubted he'd be getting away a second time. There seemed to be no way to win this unequal contest. . . .

But the beast had become fixated on Houston. Ignoring John, it turned its body back in line toward the zebra and John, dumbfounded by his own continuing idiocy, reached the monster, ran straight up its huge leg, then up its back. He finally stopped at the spot on its neck he'd occupied before.

John couldn't believe what he'd just done and perhaps the monster shared his sentiment; it froze in place again, radiating utter outrage. John could hear wind whistling through the rocks and an oddly similar whistling from three sets of panting lungs.

A squealing roar of truly murderous fury shattered the peace. The monster threw itself to the ground and began to roll over.

For an impossible few seconds, John was running on top of the immense spinning body like someone in a ghastly kind of lumberjack contest. Every time the waving arms came around, he dodged. On the sixth or seventh rotation, the monster's tail caught John in his lower back, sending him flying. He felt as if the Iron Teakettle moving full tilt had rammed into him.

He found himself lying on his back on the cold hard ground, staring up at a brightening gray sky. He couldn't breathe or move and he knew that more than one of his ribs had been cracked. Something was wrong with his ears; he couldn't hear anything except his own heartbeat. But, strangely, that heartbeat seemed to be penetrating the plateau. Even through the numbness in his back, the rock transmitted a distinct rhythmic pounding. Was some new kind of beast approaching?

Using reserves he'd never imagined he possessed, he managed the colossal task of raising his head a few inches. He was in time to see the monster bite into Houston's neck. The jaws closed, the huge head pulled straight back then twisted sharply, and the zebra was decapitated except for a thin, bloody flap of striped skin.

Still John couldn't move anything but his head.

With dreadful deliberation, the monster turned toward him. As if in a nightmare, it hopped slowly toward him and bent down with its hideous face nearly touching his. Hot putrid saliva stained with zebra blood dribbled unto his forehead. The "goggles" had come off at some point and now an emerald-green eye the size of his fist stared down. John felt a vast and poignant longing for Dana as he prepared himself to die. The pounding from beneath was getting stronger. . . .

Instead of scooping him up in its jaws, the creature stood tall and raised a clawed leg high, directly over its helpless prey. For an endless second, it stood balanced on one leg. Then it howled triumphantly and the heavy foot, longer than John's body, descended.

And was caught in the hands of a giant.

To Tornado Carter, everything suddenly seemed hollow and unreal. Lo Pan was standing above him supporting more weight than any three humans should be able to bear.

John felt a tingling spread throughout his body and was vaguely surprised to

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

be able to hear and breathe again. "When we get home," he whispered up to Lo Pan, "remind me to—"

An edge of reason cut through the wall of John's shock and grief and he became aware that Lo Pan's feet were slipping. Traction and leverage can be more crucial than sheer strength. John gritted his teeth, forced his rubbery arms to move, and grabbed Joe's ankles to give his rescuer a little more support.

Pang was nowhere to be seen.

Lo Pan's arms were spread to grip the sides of the monster's broad foot. He couldn't apply his full strength from that position but it gave him something secure to hold on to. His thick fingers were splayed out to allow room for heavy claws to stick between them. With soft grunts of effort, Joe seemed to surpass all human limitations as he slowly raised the monster's foot up inch by inch.

The towering creature, evidently locked into an idea of stomping both humans into paste, shifted more and more weight onto its trapped leg. But Lo Pan was something of a tower himself. His outstretched hands were soon over ten feet in the air, and the monster was forced to push against the ground with its tail to keep from falling backwards.

The beast changed strategies, abruptly hoisting its trapped leg higher. Joe didn't dare let go so he was hoisted up too. He tried to hold firm but when the leg kicked out, Lo Pan was thrown clear over John's supine body. John couldn't see where or how his friend had landed. The behemoth bounded cleanly over the smaller man in pursuit of the larger one.

John forgot about his own injuries and scrabbled unsteadily to his feet.

Joe was just getting up, moving awkwardly. But when King Kangaroo leaned over to bite him, Lo Pan jumped incredibly high for someone so heavy and punched the beast between its nostrils so hard that it sounded like a rifle shot.

John took two wobbly steps toward his friend. Before he'd taken a third, a clawed arm slammed down onto Joe's left shoulder. There was a distinct crack of breaking bone. The giant's arm was abruptly hanging limp at a strange and sickening angle.

"No closer!" Lo Pan gritted, waving John away with his usable arm.

"Joe! *Look out*!"

But the beast's arm fell again and six-inch claws raked Lo Pan from broken shoulder to waist. More blood to feed the barren plateau. The giant collapsed silently and John felt like collapsing himself. He loved Houston dearly, but this was *Joe*. . . .

In desperation, he lurched toward the monster, searching for a means to save this man who meant so much to him, but his mind was empty of everything but unavoidable and irredeemable loss. He was sure that his comrade was already dead.

Just then, he heard soft, quick footsteps. No one was visible yet, but at least five people were rushing toward the plateau from some hidden path on its far side.

One last time, John thought. Do it for Joe.

Charged by meager hope, he ran, waving his arms like a madman at the creature that had already cost him so much. Slowly, the monster turned its attention away from Lo Pan and towards John. Ignoring a fiery, mounting pain in his ribs, John forced himself into a sprint as he veered at a sudden diagonal, heading toward the rear of the plateau.

Maybe the monster was also getting tired. It was chasing him, but with less enthusiasm. John had to breathe in short painful gasps but he made his legs keep moving.

He suddenly realized that he was only *assuming* people were coming to rescue him and that they were properly prepared. If not, he was leading a deadly animal to a group of fresh victims.

He decided to change course but his exhausted body refused to do anything

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

but run in a straight line. The thud of heavy footsteps was closing from behind. Widening black spots occluded his vision. He began hearing a strange, rhythmic chattering, as if pebbles were rattling inside his skull. He could barely feel the ground under his feet.

Two women and four men armed with compound bows came sprinting from around a tall ridge. Without slowing, they began firing dark arrows at John's pursuer.

John, his mind as fuzzy as his vision, slowly grasped that these people were Paladin Anasazis when he recognized their leader: Chief Shining Wing. Each Indian had three stripes of bright color smeared on their cheeks: red, green, and yellow. In the space between and over their eyebrows, was drawn a small, blue Star of David inside a red circle. War paint.

The arrow-points barely penetrated the alligator-thick skin and John wondered if anyone, aside from King Kangaroo, was going to be walking off this mountain today.

Then the shafts burst into painfully bright flame. The beast began screaming horribly with low-pitched, but strangely dog-like yelps. It bounded around at random, looking like an enormous actinic torch.

John wanted to run over to Lo Pan, but his legs gave way and he could only sit on the cold ground and witness events. He glanced over at Shining Wing. Reflected flames in the Chief's eyes looked like ignited tears. Clearly, the man felt no joy in such a victory.

The monster leaped, fell and thrashed, then leaped up again, the whole time producing yowls of such merciless anguish that John knew they'd be echoing in his memory for years to come.

Finally, after what seemed an eternity, thick smoke rose from a blackened corpse. A smell permeated the air: burnt flesh spiced by the stench of volatile chemicals.

Hollow arrows, John thought. Two fluids separated by a breakable barrier, and when the arrows hit and the fluids mixed . . .

The Anasazi had made use of the "chemistry loophole." Electronics were banned on Paladin, but basic chemistry had to be allowed to further the advancement of biology.

He felt a warm hand on his shoulder and looked up into the wise, kind face of Shining Wing Krishna.

"Well met in a dark hour," the chief said and John could only nod mutely. "I regret it took us so long to get here, Marshal, we left as soon as we heard gunshots." The older man was gazing around the plateau, shuddering, when he suddenly gasped. "Ah! Is that a *man* on the ground over there? No—" his voice eased in relief. "Much too large."

John dredged up his voice. "He's a very big man. And a good friend."

"J'ai Lakshmi! He's hurt?"

"I'm afraid it's worse than that. But I need to find out." John tried to stand. "Can you . . . can you help me up?"

Shining Wing and one of the female Anasazi gently lifted John to his feet and half carried him to Lo Pan.

Blood was pooled around the giant's body, but John saw there wasn't nearly enough blood to indicate a heart that was still beating, not with those wounds.

Tears were running down John's face but he didn't know it. His entire attention was focused on the futile acts of kneeling on the ground and putting his hand on his dead comrade's chest to feel for a non-existent heartbeat.

That chest was still warm, which only added extra torment to the moment.

Then John bit his lip in astonishment. Maybe . . .

"Joe's *alive*! Thank God!" What kind of discipline had Lo Pan exerted to staunch the flow of his own blood?

Shining Wing bent down to examine the injuries. "Extraordinary! This Joe

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

must have exceptional resources. But he will need competent help and quickly."

"Hell, yes! Is there a hospital up here?"

"We call it our 'medicine center.' " The word "medicine" resonated in John's ears with the Native American connotations of power, balance, natural cycles, and spiritual therapy.

"Great! Decently equipped?"

"Yes. Luckily for your friend we are blessed with a great healer."

John still had his hand on Joe's chest. His initial relief was waning as his concern for Lo Pan rose. "How fast can he get here?"

"She. Take a breath, Marshal. We'd better bring Joe to her. He may need substantial reconstruction, and we lack time to move her entire surgery. Let's think calmly and make no mistakes. We'll take the most direct route, but we'll still need a strong animal or two to move such a large fellow so far. That's a problem. The trail ahead comes to a place so narrow that nothing much wider than an antelope can enter. Even our antelopes refused to squeeze through today; perhaps they objected to the smell ahead."

John shifted his weight restlessly. "Did you happen to notice—did you pass an elephant on your way here?"

"I'm getting on in years, Marshal," the chief chuckled, "but my eyes are still keen enough to notice elephants. Yes, there was one waiting behind that pinch in the trail. Is the pachyderm your steed or your friend's?"

"Pang belongs to Joe."

"Then we will carry Joe to Pang, or to be more realistic, drag him."

"*Drag* him? With a broken shoulder?"

"And a broken collarbone, I fear. Gather around, everybody, and listen carefully."

The chief issued orders and his warriors stripped off their jackets and began tying them together to make a loose stretcher. Shining Wing directed the assembly process. Then he gently and strategically placed arrows under the giant's arm and shoulder to act as splints. He had three warriors carefully roll Lo Pan over just enough so that the Chief could use his own jacket tied to John's to bind the arrows in place.

Lo Pan opened his eyes a crack and looked around. Then he winced and shook his head sadly.

"How do you feel?" John asked softly. "Don't try to talk if it hurts."

"I recall moments of greater comfort," the giant admitted in a thin, fragile voice. "But I weep for your Houston, Mr. Tornado. You have paid a bitter price for my foolishness."

"I've paid? *Your* foolishness? Joe, you saved my life and now you're the one lying there. I thought you were dead."

"This day I recall the worth of humility. You were right and I was wrong."

"About what? Lord above, Joe, you're scaring me. You sound so weak. . . ."

John's voice choked off and the only way he could express his feelings was by grabbing Lo Pan's hand on the uninjured side and squeezing it.

Joe squeezed back faintly and smiled ruefully. "The good student learns when to make exceptions. This day, I should have listened to your wisdom, not my endless pride in being so humble, and carried a gun."

"Damn right!" John acknowledged. "But, hell, you probably don't even remember how to *aim* after all these years." He grinned down crookedly and the intensity of his joy and fear made his friend look blurry.

Shining Wing had been listening. He squatted down again to be on the same level as John before he asked quietly, "You're Tornado Carter rather than Silver Davies?"

"Oh. Sorry about the deception, Chief."

Shining Wing only shrugged.

"No more lies, I promise."

"That's your choice. Who is Houston?"

"My zebra. His body is hidden behind one of the monsters. He's beyond help."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Shining Wing was too perceptive to miss the obvious. "I'm truly sorry; I see he was very important to you."

"Raised him from a *colt*." John wiped a dirty sleeve across his eyes. "Damn, I can't afford to be this way. Chief, we've got to *hurry*!"

"Patience! Joe? I'm Shining Wing and we're going to be moving you very soon. It's going to hurt. Can you handle it? "

Lo Pan stared up into the chief's bright eyes. "Honored to meet you, Shining Wing. Give me a moment to prepare myself."

The Indian leader stood up briskly. "Incredible! I'm quite looking forward to getting to know you, Joe. Everything ready, people? We'll roll our new friend onto the stretcher—gently!—and every one of us will be needed to drag him. We're not even going to *try* to raise him entirely off the ground, just his upper body. Understood? Everyone, get in position and breathe deeply for a minute; once we get moving, we should keep moving as long as possible.

"Several of you should return here later and pick up anything left behind. The marshal's guns are missing. Find them. Also, someone grab a few of the contraptions covering those dead animals' eyes."

"And the corpses?" one of the Indians asked.

"They can wait."

Shining Wing glanced again at Lo Pan. "Ready?"

The giant nodded.

"We'll be as gentle as possible. Is everyone filled to the brim with oxygen? I'll count to three and then we're all going to push. One, two, three . . ."

By the time Lo Pan was in place, John had recovered enough to help with the dragging. Everyone tried to be extraordinarily careful, but it was impossible to avoid jostling the giant while tugging him along uneven ground. He never complained or even flinched. But droplets of sweat began to bead his forehead. John did his damnedest to match Joe's courage. But he didn't dare let himself look back towards the spot where Houston had died.

Chapter 19

Pang was waiting just past a place that would have seemed tunnel-like if the walls to either side had curved in overhead just a bit more. John wondered if Caine's monsters been following this trail but had been forced to turn back here. Near the elephant yet keeping a respectful distance were six restless antelopes bearing Indian-style saddles and breastplates—one of the antelopes was a fantastic sky-blue. Several saddles had coils of strong rope hanging from their flank cinch billets.

"I wish we'd had time to pack some medical supplies," Shining Wing apologized to Lo Pan who smiled weakly up at the chief. "Can you hold out for another half-hour, Marshal?"

"With such people around me, I am fully content. But if you will forgive my temporary silence, I may sleep for a time."

John, alarmed by Lo Pan's increasing pallor, didn't like that idea. "Wait a second, Joe. I've got no idea how you're keeping yourself from bleeding to death—"

"When injured, I visualize ice covering the wound."

"Fine, I'll try that on my next wound. But can you keep it up if you fall asleep?"

"Kindly awaken me if heavy bleeding resumes."

"Lord! All right, have good dreams."

Warriors tied ropes to the stretcher and attached their free ends to Pang's oversize saddle and to saddlehorns on the two largest antelopes. The trail was barely wide enough to keep the animals adequately separated and Lo Pan was in constant danger of crashing to the ground. To make matters worse, the elephant was upset about Joe being hurt and kept wanting to get closer to him. That kept John busy because Pang

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

wouldn't listen to anyone else.

"Alon and Devorah," Shining Wing said in a thoughtful tone after they'd gotten up a particularly steep rise. "When we get home, you two make sure extra sentries are posted. Tell them to use lookout points farther than usual from the pueblo. If Billy Caine sends another crew out like the last one, we'd appreciate more time to prepare, eh?"

A tall, alert-looking Anasazi man nodded as crisply as a salute and the woman standing next to him said, "You got it, Chief."

It was a slow, nerve-racking uphill trip and John felt cold without his jacket. His ribs hurt. They passed several sidepaths, which John guessed connected eventually to the main trail. Lo Pan, he figured, had taken the main trail earlier and then cut over to the shortcut when he sensed he was in the wrong place at the right time. That would explain why Pang wound up on the far side of the pinch. John winced, but not because of his ribs. If only *he* had taken the main trail! Then he had a far more uncomfortable thought.

"Chief?" he asked. "You don't normally use flaming arrows, do you?"

"Certainly not!"

"So you must have known about Caine's new animals."

"Not in detail. We've been aware that his organization was perfecting some form of very large and vicious beast. But these arrows were originally developed to counter Caine's plasma-cannon. Chou Larker told us about such weapons and of their vulnerability to intense heat." Shining Wing shrugged uneasily. "We know the cannon is designed to defend itself, but we hope that when it blasts our arrows, some of their internal liquids will get through and ignite."

"Sounds like a smart plan," John said tiredly, "but you can stop worrying about plasma-cannons. Unless Caine has another one."

"What's that? Don't tell me you destroyed it?"

"With a lot of help."

"Ah, Marshal! You fill me with joy! I've been terribly worried about that cannon! Later, I'd like to hear every detail."

John wasn't looking forward to that. "Of course, Chief. So it's just luck that your arrows are such good weapons against monsters?"

"I find little good in weapons, only necessity. But our abundant supply of these arrows isn't coincidental. Anasazi have been keeping watch on Bill's activities ever since he moved to Aurado. We have our ways. And Billy is no fool. I was sure that he would eventually conclude that I knew who he was and either come after us himself, or send . . . proxies."

"I was afraid you were going to say that. I came up here to warn you and you were *already prepared*!"

Houston died and Joe's been badly injured, John told himself. And for nothing!

"Marshal, what you are thinking is painted clearly on your face, but you're wrong. I counted seven dead brutes on that field. Seven. We were *not* prepared for such an onslaught. I'm giddy with wonder that you managed to bring down six animals of such size with mere bullets! Surely few, even among top slingers, can shoot so brilliantly. But this I will thoroughly warrant: you have saved many lives today and we will not forget it."

"Thank you, Chief. I appreciate your saying that." John felt as if he'd been drowning and Shining Wing's words had pulled him up to air and life. Eased, at least to some degree, of intolerable guilt, Grand Marshal Tornado Carter kept Pang moving in a straight line and refused to let himself break down and weep.

Shining Wing's pueblo, at an elevation well above the low-hanging cloud layer, was surprisingly impressive. The Paladin Anasazi had built private homes in great

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

alcoves carved high into the soaring vertical cliff that shielded their village from northerly winds. These homes were reachable via handholds and footholds carved into the rock. Most local buildings, however, sat at the cliff's foot on a running ledge easily as wide as Sunstone's Main Street. The pueblo had an unimpeded southern view and even through John's misery, he was aware that the panorama was breathtaking. To the far south and somewhat to the west, Mounts Whitehead and McCurran poked icy tips through thick clouds. The middle distance was a vast, slowly stirring ocean of inconsistent fog.

The village seemed nearly deserted until Shining Wing called out for help. Anasazi appeared like magic, rushing out from every doorway, many clambering down the cliff with the agility of constant practice. Suddenly, the place was crowded. Dozens of arms helped carry Lo Pan into one of the larger buildings. The marshal would have followed, but Shining Wing put a gentle, restraining hand on John's shoulder.

"Your friend will receive excellent care, I promise you that. He doesn't need you right now. But I do. And I have a present for you that you will certainly find useful. Will you come with me so we can talk?"

The sky seemed closer and far brighter than it had at the plateau, yet through the veil of John's grief and worry everything appeared tinged with gray. "Whatever you think best, Chief. Pang needs food. When her stomach starts rumbling like that, feed her or get out of her way. Hope you have plenty of extra fodder."

"Don't worry about that either, Marshal. We are well prepared for visitors, even the pachyderm variety. Shall we go?"

Shining Wing led his guest down the smooth path, constantly introducing him to people. As a group, the Indians seemed both anxious and determined. Name after name rolled off John's mind without leaving a dent and he shook hands and greeted strangers politely without feeling a thing or meaning a word. The chief studied his guest's face thoughtfully while chattering away about pueblo life.

"The little handholds in our cliff are called 'Moki' steps," he pointed out. "The Earth Anasazi had enemies and they built with defense in mind."

"Who were their enemies?" John asked out of politeness.

"Possibly the Dineh, whom the Spanish named 'Navajo.' Ironically, the word 'Anasazi' is a Dineh word!"

"Ironic," the slinger repeated dutifully.

"Mind you, we don't model ourselves *too* closely on the originals. Many of us are vegetarians and might balk at cannibalism."

That got a genuine rise out of John. "The Anasazi were cannibals?"

"Perhaps. The evidence is controversial. But just in case they weren't, we've decided to forego the practice."

"Very sensible."

Shining Wing smiled merrily for an instant, which made him look much younger. Then, seeing that John was finally paying real attention, he began describing how much Caine's countywide depredations were costing the Anasazi.

"So we grow our own vegetables," he concluded, "and enough extra for barter, but we rely on the magentiles for everything from tank-grown protein to toilet paper. This used to be a cheerful place. Caine hasn't attacked us directly until now, but we've been under siege nevertheless."

"If I can, I'll put a stop to that. But . . . what in the world are 'magentiles'?"

The older man chuckled. "That's Rabbi Grinning Bear's term for the non-Indians of the valley and I'm afraid it's caught on. He has a way with words, or perhaps I should say he gets away with words."

"I get the gentiles but why magenta?"

"Did you notice on the way up here

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

how purple the valley looks from above?"

"Oh."

"Here we are; we call this structure a 'kiva.' Most of it is underground, as you'll see in a moment. We can finally get warm!"

Through an arched doorway, they descended a short series of stone stairs to a large round room dimly illuminated by tiny stained-glass windows, little more than tinted shards set high in the walls. Also, by an open gas fire glowing red in a brick-lined pit in the room's center. The air was indeed warm and smelled faintly of some exotic musk from an Asian-style incense clock on the floor, which marked time with changing aromas. There was enough light to see a line of colored figures, about a foot apart, which had been painted directly on the stone wall encircling the room. There were over a hundred figures and John recognized several.

"What do you use this place for?" he asked, finding the atmosphere peaceful and somewhat comforting.

"Meditation, group-meetings especially when there's a conflict to resolve. Vision-quests. We blow the shofar here on Rosh Hashana and celebrate Hanuwali, which combines the Jewish Festival of Lights, Hanukkah, with the Hindu Festival of Lights, Deepawali. It's also a fine spot for Lakshmi-Puja ceremonies . . . and for private conversations."

"So it is."

"This is all a strange kind of sham," Shining Wing observed as he led John to the pillow-strewn area around the fire and gestured for him to make himself comfortable. John winced as he sat down and the chief looked startled.

"My sincerest apologies, Marshal! I didn't realize you were injured. Perhaps this isn't such a good time to talk?"

"No, I can manage. It's just my ribs; I may have cracked a few. Far as I know there's still not much anyone can do about broken ribs except maybe bind them and that can wait."

"Are you sure?"

"Yes."

"Let me know if you need anything for pain. Are you hungry?"

"Not really."

"Perhaps it would help to eat something anyway?"

"I don't think I could force anything down right now."

"Then I'll make us some tea, if you don't mind."

"Tea sounds nice. What did you mean by 'strange kind of sham'?"

The older man carefully poured liquid from a covered urn on the floor into a copper kettle and placed the kettle on a grate over the fire. "I meant everything you see here," he said, waving a hand broadly. "Our entire way of life. My great-grandparents came to Paladin because they despised Calcutta's overcrowding. They were willing to play at being Native Americans for such a splendid opportunity and I'm sure they played with great sincerity. But it was only pretend."

John nodded.

"A hundred years later we're no longer pretending. In this community, we think of ourselves as genuine Anasazi. Some of us have even come to fancy we have some historical connection to the original tribe. But we don't. All this began as an idealized, fabricated vision of how the Ancient Ones lived. Even that has been thoroughly infused—some might say contaminated—with Hindu and Jewish attributes. Between you and me, I suspect my tribemates wouldn't have actually liked the first Anasazi."

"So what's strange about the fake is that it's become real."

"In a sense. Which sounds rather like 'innocence' doesn't it? The tribes have been doing this so long that few of us remember this is something of a game. I remember; but to me, the game is worthwhile. I value our 'Indian' way of life immensely. Please don't misunderstand. I expect it to change and evolve,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

but I resent someone trying to force change."

John could guess where the chief was headed. "You think William Caine is trying to change your way of life?"

"I will share a secret. Years ago, about the time I started hearing rumors about Dirty Jake and his . . . novel approach to banditry, the tribes began having what you might call intertribal problems."

"Oh?"

"Certain issues could have become *highly* divisive if it wasn't for the wisdom of Sunbasket Cohen of the Paladin Pomo."

"I've heard good things about Chief Cohen."

"Deservedly. He sent a delegation here eight years ago with an interesting complaint, Marshal. Someone had raided their supplies and destroyed some fine gardens while the Pomo were busy conducting a sacred ceremony. After much toil, the tribe located a recently used campsite, restored to pristine condition but not quite well enough. Can you guess what they found at that campsite?"

"Evidence that Anasazi had been there?"

Shining Wing smiled and patted John's hand. "Our rabbi calls such deceit 'forensic topology': the science of bending, twisting, and stretching the truth. Sunbasket showed me a few crumbs of a curry-flavored matzo only my people have the good taste to appreciate and a jar of Anasazi chickpea paste."

"That's . . . really nasty."

"I beg to disagree, our chickpea paste is delicious!" John opened his mouth but Shining Wing chuckled and raised a pacifying palm. "I'm pulling your leg, Marshal, I understood you perfectly. Yes, it was a nasty kind of deceit, subtle and poisonous. But Sunbasket and I had forged a friendship during the Annual Gatherings and apparently he thought too well of me to believe I would approve acts of vandalism."

Still sitting, the chief turned slightly to hoist up one side of a flat disk sunk partway into the floor. Beneath the disk was a shallow hole. "This is a 'Sipapu': a symbolic passageway to the underworld. And it also makes a convenient cubby," he said, smiling. He pulled cups, a bag of dried herbs, a strainer, a spoon, and a honey jar from the hole before lowering the lid.

"So Sunbasket and I made a long journey together and visited all twenty-two major tribes. It turned out that a number of grudges were brewing. Someone was working hard to break up what we call the 'Unity of Tribes.'"

"I never heard about this."

The water began bubbling and the chief pulled the kettle off the fire and threw in a handful of herbs. "We kept it a Tribal matter because we didn't want the . . . perpetrator to know we'd caught on."

"And this perpetrator was Dirty Jake."

"It took six years for us to uncover that fact; his organization is larger than you might think and appears to be organized into very separate divisions. Of course I had no idea Jake was Billy Caine until I actually met him."

"Is the vandalism still going on?"

"To some degree. We minimize damages by keeping constant watch on our valuables. Which in *itself* alters our way of life; sentries can't participate in ceremonies and celebrations."

"What do you think Caine hopes to gain by turning the tribes against each other?"

"Ah! Perhaps it's more a matter of what he hopes to avoid. Honey in your tea, Marshal?"

"Please."

Shining Wing poured tea through the strainer and stirred in some sweetener. "For years, I've been getting disturbing reports about some group systematically wiping out Paladin's private law-agencies."

"That group," John stated bitterly, "as you've probably guessed, turns out to be Caine's Mudslingers."

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Yes, I was hoping you could confirm our suspicions. We had all we could do to keep watch on Jake's . . . sabotage division and weren't certain of all his other activities. Whatever his overall goal is, it obviously entails an end to Paladin's current justice system. But his plans will surely fall through if someone merely replaces slinger marshals with something equivalent."

John's eyebrows rose. "You think Caine is afraid *Indians* will take over agency duties? Interesting. That would explain him trying to get the tribes at each other's throats. But what can your people do against top slinger outlaws? Are you willing to change your basic policies and start producing Indian slingers?"

"No! We still don't believe in 'improving' humans. But we do have something that might allow us to match any augmented human and Caine knows it."

John's eyes narrowed. "You're talking about Indian Scouts, aren't you?"

Shining Wing took a cautious sip of tea. "Careful not to burn your tongue," he suggested mildly, "this is still quite hot."

The two men sipped quietly for several minutes without speaking, each wrapped in thought. The tea had a wintergreen bouquet and a mild minty taste.

"My basic idea about Caine's overall scheme," John finally offered when it became clear that his host wasn't about to discuss Scouts, "is that he's out for power."

"What kind of power?"

How many times am I going to have to go through all this? John wondered. "Let me answer that piecemeal. If he wipes out enough agencies and keeps making trouble, don't you think that people are eventually going to have to make some hard decisions?"

"Certainly." The chief took a noisy sip. "What do you see as our options?"

"We could ask Earth for help."

"And squander our freedom? I think not."

"Agreed. Another possibility is forming a large public police department or a full-scale army."

"With proctors underfoot?"

"Right. It would have to be done in secret. Plus, as Sheriff Larker pointed out recently, armed-force type organizations need tight regulation. Paying for something like that and making sure—"

"Ah! Perhaps I see your vision now. You think that Jake desires to head up a centralized but clandestine bureaucracy. Is that it?"

John shook his head in rueful admiration. "I didn't expect you to jump there so quickly, but you're right on target."

"Your theory would explain something that's been troubling me. When I identified Billy, I asked myself why he'd disguised himself so elaborately, even undergoing facial disfigurement. Why be that careful not to be recognized? But I know how much weight he once carried with the public. Even among the tribes, we were deeply impressed with him."

"He was impressive."

"Yes. I imagine his surgery is reversible. And so strong a reputation is its own form of currency, is it not?"

"One you can trade on," John agreed. "You seem to have the picture all right! Once he restores his appearance, he can come out of 'hiding' and get elected or appointed to any position he damn well pleases. I bet *he's* figured out a way to hide an army from the proctors."

Shining Wing stared into his cup. "I'm bothered by one point. You'd told me, if I recall our conversation in the saloon, that you knew the man personally?"

"He helped train me."

"Did he ever seem to be a person who would seek power for its own sake?"

"No."

"I only knew him when he was young, but I remember him as an idealistic fellow."

"If you're asking me what Caine plans

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

on doing with all this power, Chief, I've got no idea."

"Alas, neither do I."

Chapter 20

John took a final gulp and set the cup down carefully. He could guess the next topic of conversation. Wanting to postpone the inevitable, he glanced around at the wall paintings. "Interesting symbols. Who's that character with the horn?"

"His original name was Kokopelli. To the old Anasazi, he was a power icon, a hunchback magician playing his magic flute. But around here, we think of him as an avatar of Vishnu, my namesake, Krishna. We call him Krishnapelli."

"And the spiral?"

"The 'Spiral of Life.' Marshal, would you care to tell me how you destroyed the plasma-cannon?"

John sighed inaudibly and reluctantly began talking. He intended to state the barest details, but under Shining Wing's bright and sympathetic eye, he found himself opening up, telling the entire painful story.

When he finished, the chief closed his eyes and was silent for a time. When he finally spoke, his voice sounded firmer, as if he'd made a difficult resolution and was determined to stick to it.

"That vest you mentioned," he said. "Would Billy be permitted to wear such a thing during your duel?"

"Lord! I don't know. He *shouldn't* wear it, but the Slinger Code doesn't cover something like that."

"Very well. You're going to need something to offset his advantage."

"I'll say. Have anything in mind?"

"A while ago, you mentioned Indian Scouts."

"Yes?" John's heart began beating faster.

"No secret lasts forever, but I'd like to preserve this one as long as possible. So I'm going to make you an offer, but with one unbreakable condition: you will keep what I'm about to share with you utterly confidential. Do you agree?"

"Is this information a threat to people I'm sworn to protect?"

"Good question, Marshal! You are an honorable man, but that I already knew. I'll install an extra clause in our contract: if the tribes begin *misusing* this secret—and you will be able to tell—you'll be free to reveal anything you like."

"Then I agree to your terms."

"I thought you would. Just dying to know about Scouts, aren't you?"

John looked somewhat abashed. "I've been . . . curious about this since I was a kid."

"Understandable. Wait here, I'll be right back."

The chief put down his teacup, jumped to his feet as lithely as a child, and left the Kiva swiftly but unhurriedly. While he was gone and the minutes dragged on, John tried not to think about Houston or worry about Lo Pan and failed on two counts.

Mostly for distraction, he tried to discover how the room was kept ventilated; but a large hexagonal plate descending from the domed ceiling obscured its apex. A red circle large enough to stand in (assuming you could stand upside-down) was centered in the plate. Perhaps this was the antithesis of the "sipapu" hole in the floor. Maybe it was a ceremonial passageway to the stars.

When Shining Wing returned, he was wearing his jacket, wrinkled from being used as a rope. Another Indian-style jacket was draped over one shoulder. Over the other was slung a large tank-leather pouch.

"They're still cleaning your coat, Marshal, so I borrowed a—"

John scrambled to his feet and was staring in amazement, his hands scrabbling automatically at his sides, futilely, for the reassurance of pistol grips. Shining Wing wasn't alone, that much was obvious. But John, to his shock, couldn't tell who or what was accompanying the chief. He'd never seen any-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

thing like this . . . .

"No cause for concern!" the chief said, obviously struggling not to laugh. "You're not afraid of an old chubby rabbi are you? Don't you remember David Grinning Bear?"

"I'm younger than some people I could name," Grinning Bear's voice announced in an aggrieved tone. "And I'm *not* chubby. I'm merely built on a scale commensurate with my intellect. Shalom and namiste, Marshal. Welcome to the New Nokai Dome!"

John remembered the bearded rabbi, but he couldn't recognize him now. The eerie apparition moving towards him kept changing colors and its outline kept blurring confusingly. "Thanks," John replied uncertainly. "And peace to you, too."

"My malnourished leader here claims you're not the renowned marshal Silver Davies, but the even more renowned Tornado Carter. Take my advice and stick to that identity! Your next upgrade might make you too famous for mere mortals such as us. As is, it's a great honor to re-meet you."

"Thank you again, Rabbi. I'm Carter all right."

"David, my lad," the chief interjected. "Could I trouble you to stand over by the wall for a moment?"

"No trouble at all, Arjunji."

When the blurred figure got within a few feet of the wall, the random colors abruptly clarified and steadied. Now it matched the pattern, colors, and seemingly even the texture of the stone perfectly. Two symbols, the spiral and another that suggested a man holding a whip, had appeared on what John guessed was the rabbi's chest. These symbols, he remembered, were painted on the wall directly behind where Grinning Bear was standing. The man himself was only visible as a distortion of the wall.

"What is—what kind of—how are you *doing* that?" he sputtered.

"As you may know," Shining Wing said quietly, "we tribespeople dance to our own music in the arena of genetic research. What you are gaping at so widely is the secret of our Hidden Scouts: modified cells of the *Sepia officinalis*."

John had to think for a moment. "Cuttlefish cells?"

"Goodness. I'm truly impressed. Did you hear that, Rabbi? Look to your laurels—there's another scholar among us! You certainly know your denizens of another deep, Marshal."

Various species of terrestrial sea-creatures could be found on Paladin, thriving and breeding in salt or freshwater tanks. Most large aquariums were used strictly as specialized genetic laboratories, but assorted crustaceans, intended for human consumption, were bred on the continents of Espoir Nouvel and Mix.

John had never heard of anyone raising cuttlefish, but that wasn't why he kept blinking in surprise. "So this is a *biological* effect? Lord! I always figured—I thought the secret would turn out to be some . . . I don't know, arcane spiritual discipline."

Shining Wing giggled. "Mystic Powers rediscovered by the Great Council of Yogis."

Grinning Bear joined in. "An ancient formula from the lost pages of the Kabbalah!"

"Or maybe plain old Indian witchcraft, eh?"

"Some kind of bruja-ha?" Grinning Bear offered.

The chief exploded with a full belly laugh. "Congratulations, David. That may have been your worst ever! Sorry to disappoint, my dear Marshal, but no. Our scouts do need training to make the most effective use of the effect, but I'm afraid there's nothing spiritual or mysterious about it."

Now that the shock was wearing off, John was taken by how cheerful these two men were acting while their tribe was in such dire straits. Their tribemates

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

had seemed so scared and depressed. Perhaps that's *why* they were being so careful to keep their spirits up. . . .

"This cuttlefish material is that present you mentioned? The one you thought I'd find useful?"

"Not at all! This is just a—let's call it a favor; a favor you've more than earned. My gift to you is something quite different. But after hearing you out, I decided to shatter tradition and provide you some of our Sepia ointment. We refer to it as a 'Kachina Cloak.' After you apply it, it won't last long. The cells starve when deprived of nutrients, but perhaps it will serve to equalize your upcoming contest."

John stared at his benefactor and considered the magnitude of this favor. "I can certainly see how it might help. And I . . . I'm deeply honored that you would entrust me with such a secret."

"I've met no one easier to trust."

"Thank you. Does your magic cloak come with instructions?"

Shining Wing grinned broadly. "Such as wash in cold water only? It isn't a fabric in the usual sense. I'll give you directions when you actually get your supply. Since it's going to have to last for another six days in its jar of nutrients, you'll need as fresh a batch as possible. We'll wait 'til the last minute before we fetch yours. Meanwhile, there are two simple guidelines you can start bearing in mind. Always face whomever you wish to hide from. And make sure your back is close to an irregular and colorful surface but not pressed against it. Unless you want to look like your own shadow. Our beloved rabbi is facing us quite properly, and he's left adequate space behind his back. But he's had little training as a Scout and has chosen a poor location for hiding. Personally, I find that bulge on the wall highly suspicious."

From the bulge came a grumble. "*You* chose the spot."

"So. Better make that *three* rules. Don't talk if you expect to remain hidden! Any questions?"

"Right now, I'm mostly wondering how Joe is doing."

"Why don't we go see? I brought you a jacket so we can both be outdoors in comfort."

By the time John left the Anasazi Medicine Center, he felt fifty pounds lighter. Just seeing Joe looking so much healthier surpassed any balm. He hadn't forgotten Houston's death, but now he had heart enough to accept his grief and even, in a small way, to embrace it as an inevitable price of deep attachment.

Shining Wing had enthusiastically introduced him to Medicine Woman Rachael Twilight Breeze Bloom who was one of the four female Pillars of the Anasazi Council. She was Straight Arrow Meyer's wife. The Chief said that Straight Arrow and Hinanetaa Shankar, both of whom John had met at Dana's saloon, were off on a diplomatic mission to the Paladin Sioux.

Dr. Bloom was four inches taller than John. Her skin had a faintly olive cast that complemented her dark green eyes and she wore her long silvery hair braided in a single ponytail. Her saffron smock was meticulously clean. She moved very carefully as if she were constantly afraid of knocking something over. She was a bit curt, but John got an impression that this was the result of struggling with herself not to be overly solicitous.

The chief had apparently made some covert gesture behind John's back, because after the introductions, Dr. Bloom had informed John that he was going to have to put up with some "fussing" before she'd allow him to see Lo Pan. This "fussing" proved to be a brief medical examination and treatment for his injuries. Shining Wing stayed to observe but kept out of the doctor's way.

Three of John's ribs were broken, but the fractures were simple and healing required nothing more than time. Dr. Bloom wrapped his chest in her own version of artificial skin, more comfort-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

able and flexible than tape or cloth. She also gave him a nasty-tasting drink she claimed would help him feel better and speed up bone regeneration. She cautioned him to take it easy and to breathe as deeply as he could several times a day to avoid fluid build-up in his lungs. When he agreed to faithfully follow her orders, she closed her eyes, put one hand gently on his head and chanted a healing prayer in Hebrew. Then she led both men to the room where Lo Pan was recovering.

The giant was lying on his back with pillows under his knees and another under the small of his back. Even with three mattresses fitted together, the bed was barely big enough for him. He was wide-awake, smiling peacefully. If he didn't have a cast covering one shoulder, he would have looked healthy and strong enough to carry his own elephant.

While John was grinning back at Lo Pan, Dr. Bloom explained that she preferred using the new tissue-softening biochemicals for her operations rather than crude, old-fashioned scalpels. The newer system allowed a surgeon to gently separate layers of skin and muscle to get to the underlying skeleton. It took real skill to work around exposed blood vessels and nerves but the result was far less physical trauma to the patient. There was one disadvantage: that patient would have to remain immobilized until the transformed flesh fully re-solidified.

Joe wasn't going anywhere for a few days. His only request was for John to tell Lilly where he was and to inform her that he was having a nice time so she shouldn't worry.

"Think she's worrying more than usual about you, Joe?"

"I have often observed, Mr. Tornado, that when it comes to me, my Lilly has her own compass."

"I've noticed that myself. I'll get the word to her as soon as possible."

Shining Wing cleared his throat. "I need Marshal Carter for awhile yet, Marshal Li; but if you like, I could dispatch someone with a message for your wife right away."

Lo Pan's eyes closed contemplatively. Then he opened them, gave Shining Wing an appreciative look, but shook his head in reluctant denial. "Your kindness feeds my heart, Chief, but I have a concern. The path from here to Sunstone may contain those who mean Anasazi harm. I'm sure your warriors are exemplary, but I would prefer to wait until Mr. Tornado can do this himself."

"My warriors are not only exemplary, they can be . . . subtle."

"I don't doubt you, but why take unnecessary risks?"

John saw the wisdom of this. "All right, Joe. But listen up! I don't want you out of this bed until Dr. Bloom *kicks* you out. Hear me?"

"I hear," Lo Pan repeated humbly.

Outside, Mebsuta had reached as high as it could during this season of rapidly shortening days. The gray overcast had dissipated just enough to smear the distant but immense sun into a thin shell of light painful to look at despite its seeming dimness.

The chief led John back toward the kiva and then past it, and John was sufficiently restored to admire Shining Wing's social skills. The man seemed to genuinely like the people around him and, clearly, the feeling was mutual. Everyone he talked to seemed to stand a little taller afterwards.

The wide pathway curved to follow the cliff's contour. As they walked, additional parts of the Pueblo gradually came into view. The drop-off to the south was gentler here and the southern hillside had been thoroughly terraced; every terrace was verdant with crops genetically manipulated to grow well during rainy season.

The community compost pile, which had attained an almost sacred status on topsoil-poor Paladin, steamed in the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cold air.

Fifty or more people were scattered over the hillside, tending the plants. A few noticed the two men standing at the top and waved a greeting. Between assorted vegetable gardens, a dozen varieties of fruit tree leaned out from the hill as if they, too, were enjoying the magnificent view.

A broad staircase with a ramp in the middle had been carved into the hillside and Shining Wing led the way down the oversized steps. A long thick rope, coming from a winch and pulley system at the top was connected to a big open cart halfway down the ramp.

"I can see how you'd need something like that cart," John observed. "Hauling a big harvest up this slope would be no picnic."

"Very true. Even hauling a picnic up this slope is no picnic!"

"I suppose not," John responded absent-mindedly. A very depressing thought had just creased his mood: he was going to have to ride Pang if he expected to return to Sunstone before dark. This would leave Lo Pan stranded in an emergency. He doubted the Anasazi had any beast big enough for Joe. Perhaps John could borrow a steed. He felt strangely helpless, isolated and lonely, without Houston.

They reached the hill's base and proceeded along a road wide enough for three elephants to walk abreast. The Indian led them westward at first but the trail gradually curved north. On John's right side, the hill steepened progressively and began to resemble a mountain face. Here the hill had shrugged off its mantle of soil to reveal rocky bones. To the left, a small ridge that had been unobtrusively accompanying the trail suddenly shot up, becoming a respectable cliff of its own. A wide tunnel had been blasted clear through the ridge shortly beyond this point and a heavy wooden gate blocked its entrance. The chief unlatched the gate, swung it open, and motioned for John to move on ahead into the tunnel, which was about twenty yards long.

It was dark inside, which made the far end of the tunnel glow as brightly as hope.

"My gift to you is waiting in the pasture," the chief said in a bland voice. "But this is one gift that must agree to be given."

"What do—" John began, but ran completely dry of words upon stepping back under the open sky. Bounded by cliffs on all sides was a lovely and supremely lush valley. A large, heavily lacquered wooden shed stood nearby. A bit farther along, knee-high rainy-weather grass grew exuberantly outside six large fenced-in pastures, but the pastures themselves were kept cropped short by herds of enhanced antelopes. As was the practice everywhere on Paladin, the precious topsoil was conserved by low retaining walls.

The valley's extreme beauty was startling, and some of the antelopes had truly exotic colorations, but these things weren't why John was standing stock still with his mouth open. One of the animals here wasn't an antelope.

John had seen spectacularly impressive beasts before, but none had given him such a jolt of sheer wonder as the creature staring back at him from across the strongest-looking of the fences.

"Grand Marshal Tornado Carter," Shining Wing announced formally, "Allow me to introduce *Indra*. Indra is something of a . . . pet project of my tribe. Alas, like most animals with such heavy genetic alterations, he is sterile; and for some unknown reason, we've been unable to grow viable clones. That's unfortunate in one way, but in another, I find the idea of his being unique rather esthetic. What do you think of him?"

John gazed at the Anasazi "pet project" and tried to frame a suitable response. It wasn't easy.

For openers, the animal was of an extremely rare type. Few members of the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

cattle family lived on Paladin and even fewer African or Indian buffalo. And John, in his lifetime, had only seen one bison. But Indra was obviously some kind of buffalo, and he most resembled the American species whose scientific name was a landmark in redundancy: Bison bison bison. This beast, however, had a relatively small shoulder-hump.

But he himself was enormous, larger even than Pang, over eight feet at the shoulders. And he was a bright, almost incandescent, white. Under the gray sky, he shone as if the sun was spotlighting only him. His eyes were exceptionally large and intelligent; the irises were like black opals: a jet matrix filled with flecks of fire that changed color with every slight change of angle. Like my gun-grips, John thought.

Indra's preeminent feature, however, was a single, spiraled horn that jutted up from his broad forehead at a 45-degree angle. The long horn appeared to be made of rock crystal with a slightly bluish cast; you could see distorted landscape right through it. It came to an alarmingly sharp point. The buffalo's shaggy head and eye-sockets had been altered from the norm to allow him to look directly forward, up or down, or out to each side without moving his head. It occurred to John that the Anasazi had made sure their pet could *aim* that horn. Indra's platinum beard nearly touched the ground.

The white buffalo unicorn abruptly nodded and snorted as if he'd been studying John and finally decided that he approved. Something akin to . . . recognition had flashed in the opal eyes. Heavy as he was, he trotted closer to the fence with a goat-like spring to his step. The animal seemed to vibrate with joy and energy.

"Bless us all," the chief whispered. "I think you're just what he's been waiting for all his life."

"How in the world," John finally managed to choke out, "have you managed to keep *this* secret?"

"So. Like what you see, then?"

"Like? Lord above! I'm flabbergasted!"

"This valley is quite private and Indra is only four years old. He isn't a total secret, of course. Chou knows about him, for example, although he's never seen him."

"That's a pity! Your animal is a . . . a planetary treasure. *Everyone* should get a chance to look at him."

"*My* animal? You haven't been paying proper attention, my friend. Indra is yours."

"What? What?"

"You defended us and lost your steed. Therefore you must have a new one, isn't that so? I know that Indra will never replace Houston in your heart, but he's faster than you may credit and smarter than you could dream. We have no finer steed to offer so I can only hope Indra will prove worthy of you."

"Worthy of *me*? I don't know what to say, Chief. But how could I possibly accept such a gift? How could I possibly deserve it?"

"Ah! Among my people, individuals are disqualified from assessing their own worth. We have a saying: 'You can't see valor in a mirror.' You are sufficiently worthy and I am uninterested in arguing the point. Of course, if you reject our gift—" Shining Wing's eyes radiated good humor "—I will be forced to browbeat you until you change your mind. You don't want to put an old man through so much bother, do you?"

John laughed and shook his head. "No, I'd hate to make you work for this on top of everything. And somehow, I don't think I could ever win an argument with you. Lord! This is too incredible, but—well, hell, I *do* need him. And since I'm not up for a browbeating today, I guess I'll have to accept. But, honestly, I don't see how I can ever thank you enough. Are you sure about this? Will your pet even let me ride him?"

"That remains to be seen. He permits me to ride him, but rejects most others of the tribe. As I said, this gift must al-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

low itself to be given. I will tell you this much: I like that look in his eyes as he watches you. He's never gazed at me that way."

"What do you want me to do?"

Shining Wing reached into the pouch he carried, pulled out a handful of baby carrots, and passed them over to John. "Walk up to him, slowly, and see if he will accept these little treats. If he lunges at you with his horn, my best advice is to dodge."

"I'll bear that in mind. I take it he isn't, um, tame?"

"Indra is a very gentle soul. But maybe he's just pretending to see your good qualities."

As John approached the bison, Indra sniffed the air and reached his great head forward eagerly. The animal exuded the pleasant and surprising aroma of freshly cut grass.

"So far, superb, Marshal!"

"How does he keep himself so clean?" The shaggy white hair was spotless even from close up.

"You'll see. Put one carrot at a time into your open palm. Keep your fingers straight."

Indra's horn was directly over John's head now as the great buffalo sniffed, with evident pleasure, at the tiny vegetable. John expected the animal to pick up the carrot with teeth or lips; instead, a tongue as long as Lo Pan's arm snaked out. The narrow tip was divided into two sections that separated, deftly grabbed the morsel, and hauled it swiftly back inside the wide mouth.

John glanced down at his hand. It was dry. Indra hadn't so much as slobbered on him.

Shining Wing's laugh filled the valley. The chief was standing behind John but could guess John's facial expression. "Our little Indra has a few built-in surprises, eh? There are more and better, but I'll think I'll let you discover them for yourself."

The marshal was already feeding his new steed another carrot. "Don't tell me he cleans himself like a cat?"

"If you do not wish the truth, I must stand mute. But before I fall silent forever, I should tell you that our pet's saliva makes a superb antibacterial agent. If you're ever injured and lack medical supplies, have him lick the injury. He will be willing to do so—despite being a natural vegetarian, wound-licking is built into his nature."

"I'm not sure I approve that notion. He might decide he enjoys my flavor and then where would I be?"

Soon, the animal had eaten every carrot and was standing patiently, allowing John to scratch behind the small bovine ears.

"Our gift wasn't pretending, Marshal. He definitely likes you."

"I'll tell you something, Chief. Back home I've got this genius working for me, Dr. Ben Winfrey; he's one of the best gene-hackers around. But he's going to be chewing his moustache off from jealousy if he ever gets a look at Indra here. What craftsmanship! That horn is superb, what's it made of?"

"Specialized proteins. Clear, hard, and just flexible enough. A deadly weapon with all that weight behind it."

"I believe it. What now?"

"We go into the shed and pull out some equipment. Then I give you a short riding lesson. Ever used a reclining saddle, Marshal?" ■

To be continued!

Injustice is relatively easy to bear; what stings is justice.

—H. L. Mencken

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE REFERENCE LIBRARY Tom Easton

Cybele, with Bluebonnets, Charles L. Harness, NESFA Press (P.O. Box 809, Framingham, MA 01701), $21.00, 157 pp. (ISBN: 1-886778-41-8).

The Omega Expedition, Brian Stableford, TOR, $27.95, 544 pp. (ISBN: 0-765-30169-5).

The Apocalypse Door, James D. Macdonald, TOR, $22.95, 224 pp. (ISBN: 0-312-86988-6).

Manta's Gift, Timothy Zahn, TOR, $24.95, 427 pp. (ISBN: 0-312-87829-X).

The Lobotomy Club, Clifford Pickover, Lighthouse Press, $14.95, 264 pp. (ISBN: 0-9714827-7-2).

Liquid Earth, Clifford Pickover, Lighthouse Press, $14.95, 272 pp. (ISBN: 0-9714827-2-1).

The Mountain Cage and Other Stories, Pamela Sargent, Meisha Merlin, 366 pp., $30.00 hc (ISBN: 1-892065-61-4), $16.00 tp (ISBN: 1-892065-62-2).

Martians and Madness: The Complete SF Novels of Fredric Brown, Ben Yalow, ed., NESFA Press (P.O. Box 809, Framingham, MA 01701), $29.00, 633 pp. (ISBN: 1-886778-17-5).

Death and the Librarian and Other Stories, Esther Friesner, Five Star, $23.95, 292 pp. (ISBN: 0-7862-4682-0).

Dancer in the Dark, Jack Chalker, Five Star, $24.95, 285 pp. (ISBN: 0-7862-4680-4).

In the Distance, and Ahead in Time, George Zebrowski, Five Star, $23.95, 227 pp. (ISBN: 0-7862-4687-1).

Star Song and Other Stories, Timothy Zahn, Five Star, $24.95, 265 pp. (ISBN: 0-7862-4696-0).

I have had occasion to review novels by Charles L. Harness several times over the years (*The Catalyst* [September 1980], *Firebird* [October 1981], *Redworld* [December 1986], and *Krono* [August 1989]). Glancing back at those reviews, I find that I have praised him as charming while also criticizing a tendency to improvise too freely. His writing has been uneven overall, though individual titles have been quite interesting.

His latest, **Cybele, with Bluebonnets**, may well be the best thing he has ever done. It is certainly the novel I have enjoyed most this month, and it is, of all things, a ghost story.

A ghost story? For *Analog* readers? Why not? Harness is himself a chemist and patent attorney and his novels have been toward the hard end of the SF scale. He would be a very *Analog*ical fellow even if his shorter pieces had never graced these pages—which they have.

Cybele has the feel of a memoir, which is perhaps not surprising. As George Zebrowski notes in his introduction, Harness has always rooted his writing in autobiography. Each novel is then in a sense another chapter in a continuing memoir of chemistry and patent law.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

This chapter begins in the 1920s, in the Texas of Harness's childhood, with a young boy who will grow up to be a chemist and patent attorney. A typical boy, Joe Barnes is enchanted by his high school chemistry teacher, Cybele Wilson. He can hardly wait for class, where he "could daily undress her with adoring lascivious adolescent eyes." She is also something of a social outcast, for she is intelligent, single, educated, fond of forecasting the technological future (in terms that made me wonder if she would turn out to be a time traveler), and raised in the monastery of Saint Joseph of Arimathea, where—according to rumor—the Holy Grail itself is preserved.

Things turn weird after Joe recalls a time some years previous, when he had found an excellent skipping stone (a fossil, actually, with a hole in its center). Alas, it skipped off the water into the mouth of a streambank cave, and when he pursued it, he found the cave was occupied. He did not, however, linger long enough to learn whether the occupant was beast or human, monster or mortal. Thoroughly spooked, he fled, leaving his skipper behind.

And then, one day in class, his chemistry teacher produces the very stone he had lost. He is spooked again, yet there is now a sense that Joe and Cybele are linked in some mysterious fashion. That sense strengthens as she nudges him toward chemistry and part-time work.

When Joe graduates, it seems for a while that the link is severed, but the fates have other plans. They meet by chance and she tells him of a job opening. He starts studying at a local bible college, until his creativity gets him condemned as a spawn of Satan. And then . . . another chance encounter? The link between them snaps strong, glows white hot, and they are lovers. Yet the relationship is doomed in more than one way. It must end, in the pain of loss and a mystery involving the mystic powers of the Grail.

Yet Joe and Cybele are not done, for she has sworn never to leave him, even if she must fulfill her vow in a thoroughly unusual way. If you think that is a reference to impending horror, rest assured that only joy is to come, in a context shaped by Harness's major continuing themes of the power of hope and the denial of death. As he must, Joe moves on, traveling to Washington, D.C., getting his chemistry degree, working for the government during World War II, and getting a law degree. He even finds another to love and marry, and with whom to make the perfect child.

I dare say no more, except to promise you a most pleasurable, enchanting, and satisfying read. As Zebrowski says, Harness has always impressed some people as a master. I have been more skeptical in my past reviews, but *Cybele,* I proclaim, is indeed the master at the pinnacle of his powers.

The Omega Point is an idea that has fascinated a number of SF writers. It is the end of time, when life and intelligence have evolved to fill the universe, perhaps in the form of a colossal artificial intelligence, and the universe itself is dying, either by expansion and heat-death or by Big Crunch. The Final Intelligence might as well be god, for it will decide that there is nothing better for it to do than to simulate all the beings that have ever lived within its memory spaces. Thus we will indeed live again, and since the heat-death stretches into the indefinite future and the Big Crunch puts time on hold for anything falling into the universal singularity (as at the event horizon of a black hole), we will live forever after.

Maybe.

It is not surprising to find Brian Stableford turning his attention Omegawards, for he has lately been much concerned with immortality and death, beginning with *Inherit the Earth* (reviewed here in February 1999) and con-

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

tinuing through *Architects of Emortality* (March 2000), and *The Fountains of Youth* (October 2000). He has described the development of nanotech and biotech modes of life extension and their impacts on humanity, and in *The Cassandra Complex* (September 2001) he followed the career of Mortimer Gray, who took centuries to write the definitive history of death. Now, in **The Omega Expedition**, he shifts forward in time, to the Fourth Millennium, when Madoc Tamlin is awakened from a long cryonic sleep. He cannot remember why he was iced—only that that is the fate of criminals—but he soon discovers that he and serial killer Christine Caine are apparently warm-ups for the revival of Adam Zimmerman, "The Man Who Stole the World" for the megacorp cartel that now owns everything and the man who used his wealth to found and fund the Ahasuerus Foundation to develop immortality—and wake him when it's ready for him.

Madoc spends a bit of time worrying about how he can possibly fit into a world so far out of his temporal joint. Perhaps, he thinks, he could be re-frozen, to be awakened again another millennium or so into the future, and again, and again, and thus undertake an expedition all the way to the famed Omega Point. Yet if one can only avoid accident and murder, immortality is also a sort of Omega Expedition, and there are now several sorts of immortality available.

There are also job offers from characters we met in previous installments of Stableford's saga. Mortimer Gray is coming to witness the grand awakening of Adam Zimmerman, as is Michael Lowenthal, representative of the cartel Adam helped create. Representatives are also coming from the outer worlds, riding spaceships controlled by highly sophisticated artificial intelligences (who are definitely not *really* intelligent, you understand. Oh, no!). Zimmerman is to be greeted by emissaries from all humanity, and as soon as possible he is to be given a tour of the local scene.

That's when things go wrong.

"Extreme danger!" bellows the spaceship *Child of Fortune* (*pace* Norman Spinrad) as it enfolds everyone for safety and supplies visuals of a pirate attack.

Waaiitt a minute, says Madoc Tamlin. No way. These visuals are fake!

And so they are. A new force has joined the game, and all humanity is suddenly at risk. Stableford delays identifying this force as long as he can, but I think I've handed you enough clues to identify it. The result reminds of the books of Hans Moravec, among others, and it is thereby an interesting capstone to this multi-volume meditation upon death and mortality.

And a meditation it is. Stableford is writing novels, and some are active enough. But if you crave action, you probably won't enjoy *The Omega Expedition*. It is distinctly cerebral, in the British mode; interesting, but not a thriller.

Literary private eyes and secret agents seem to be pretty secular folks. They smoke, swear, drink, bed the pretties, play rough, and generally behave no better than they have to. But priests smoke, drink, and bed the pretties too, as we've been learning from the scandals rocking the Catholic church in the last few years. And the Warriors of God have been known to play rough as well. Think of the Inquisition. Think also of the Crusades, and the role played therein by militant orders such as the Knights Templar.

Most folks surely think the Knights Templar are long gone, dismantled in the wake of scandal and conspiracy. But, says James D. Macdonald in his latest, **The Apocalypse Door**, that's far from the truth. They're still around, and the Inner Circle sends its agents into the world to fight the forces of Satan.

Meet Knight Peter Crossman, who has just finished checking out black

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

masses in Canada. His new target is a warehouse in New Jersey, which may have something to do with some missing UN peacekeepers. He and his apprentice get past the guards and find high-tech security and a crate full of reeking compost and mushrooms that recoil from a cross.

Not a good sign, he thinks. That's when Sister Mary Magdalene of the Special Action Executive of the Poor Clares sidles up to him in the bar where he's waiting for a contact, nibbles his ear, and whispers, "I've come here to kill you," and joins the mission. A few minutes later they find the contact in an alley, missing his face.

And Macdonald is off and running, playing with the ancient split between the Knights Templar and the Teutonic Knights, the legend of the Baphomet, the conventions of the secret agent yarn, and alien invasion. That's right—it's science fiction after all, and it works very well. Macdonald is good, and he has a very entertaining gimmick here. With luck, he'll play with it some more.

Timothy Zahn's novels have showed up in this column nine times since 1984, when I reviewed *The Blackcollar*. In 1985, *Cobra* began a popular series. Later he added more works to his shelf, including three Star Wars novels.

What's he up to now? **Manta's Gift** opens as Jakob Faraday and Scotto Chippawa ride an exploratory probe as it is lowered deep into Jupiter's atmosphere. All is going well until they begin to hear a humming noise. Flying shapes—living things!—appear out of the surrounding mists. One hits and breaks the tether. They begin to plummet into the depths, but then a larger being rises beneath them to slow their fall. Skin begins to grow around them, and that's when they manage to blast free.

Years later, Matthew Raimey, a young chucklehead, tries to ski through a tree. Instead of impressing his girlfriend, he turns himself into a quadriplegic. While he is glumly sinking into his hospital mattress, Faraday shows up with an offer: They've been studying the Qanska, they've learned to talk with them a bit, and they have a deal. The Qanska are willing to foster a human, a process involving surgical modification, implantation in a Qanskan womb, and rebirth as a Qanskan in form, albeit still human in brain and mind.

It sounds like quite a trick, and it surely would be a nifty way to study an alien species from the inside out. But Raimey is skeptical, at least until the forlorn wee hours of the next night. He accepts the offer, and soon he is being reborn as Manta.

It takes him awhile to adjust. His brain and mind have a lot of new tricks to learn, and some things he may never manage. For one thing, he just doesn't think like a Qanska—as Qanska grow, they pass from infancy through childhood to Breeder status to Protector and onward. It is the job of the Protectors to fight off predators. But chucklehead though he remains, Manta has the human idea that if someone's in trouble, you jump in to help. You don't wait for the big guys to show up. Certainly not if you can make it work.

Despite the difficulties, he makes friends. He acclimates a bit. He has some hope of really doing some good work as an observer and intermediary. That's when Faraday springs Manta's real mission on him: Earth's heavy-handed government is convinced that the Qanska have a star-drive hidden somewhere on Jupiter, and they want it.

"This is crazy," says Manta, and he takes off. He is no longer going to play the game.

So the government sends a goon to take over the project and use thoroughly goonish tactics to pry the star-drive out of the Qanskans. When Manta interferes, the goon turns him into a puppet—until one of Manta's friends finds a counter and in the process turns Manta into a pariah.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The situation is not good. Chaos rules in Jupiter's clouds and on the orbiting station. But in due time . . .

Remember the title. Manta has to find a prize for someone, and given that the only maguffin in sight is the one the humans want . . .

The Astute Reader can surely fill in the blank there. But Zahn provides a good deal of detail, as well as another maguffin, before he wraps things up. As usual, he draws his characters simply—there is a distinct tendency to caricature—and often poses them rather stiffly on the stage. Yet Zahn is ingenious in his plotting and well versed in keeping things moving. *Manta's Gift* leaves the reader feeling very satisfied.

Clifford Pickover has written a number of books dealing with math, religion, and even art. I've reviewed several of the math books here, and you may recall the description of the way he presents math—infinities, higher dimensions, and so on—as a guided tour. His tour guides tend to be fey characters embarked on zany quests, and the overall feel is distinctly surreal.

So now he's decided to chuck the math and concentrate on the tour guides (the math creeps in from time to time but is by no means central). The result is his "Neoreality" series, consisting of four novels, **The Lobotomy Club**, **Liquid Earth**, *Sushi Never Sleeps*, and *Egg Drop Soup*. In the first, Adam, a neuroscientist, meets a girl who introduces him to the club of the title, a group of strange friends who have dedicated themselves to altering their brain anatomy (not merely the chemistry) so they can see new realities. Adam agrees to induce in them and himself the "Cerebral Mobius Strip," which had been found in the brains of monks given to trances and visions (though it apparently killed them).

This doesn't strike me as a particularly bright idea, but what the heck. This is fiction, right? So pretty soon Adam and the girl are strolling from New Orleans into a desert where Noah is building his ark and a giant mantis is devouring people. It takes a while to get home again.

In *Liquid Earth*, private eye Max is engaged by a lady, part of whose brain has been replaced by a chunk of gibbon brain. His mission: To seek the source of the chronoplasmids terrorists are using to warp reality. Dollar bills show John Adams, and no one (except Max, of course) seems to notice. So pretty soon Max and the lady, accompanied by a robot cat, are struggling across a rather rubbery landscape, coping with vanishing roads and tribes of savage gibbons, in search of the chronoplasmids. They know the source is in a supermarket, right over there, but they just can't seem to get to it.

If you like tales constructed with dream logic, you'll love these.

Pamela Sargent has been contributing excellent stories to the library of science fiction and fantasy for many years. There was *The Golden Space* (reviewed here in June 1982; it dealt with the conflict of rationality and sexuality), *Earthseed* (January 1984; maturation on a colony ship), *Venus of Dreams* (June 1986; the beginning of a three-volume family saga of the terraforming of Venus), *The Shore of Women* (August 1988; post-post-holocaust feminist absurdity and reconciliation), and more novels. A baker's dozen of her shorter works are collected in **The Mountain Cage and Other Stories**.

The first story, "The Sleeping Serpent," should be enough to whet your appetite. Here is a North America never named by Amerigo Vespucci. The English cling to the northeastern coast, but south, on a long island not far from the land of the Hiroquois, is a city of Mongols. In this world, their wave did not ebb from the western borders of Europe, but washed on, flooding all but the island kingdom. Now an emissary, Yesuntai Noyan, has arrived from the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Khan with word that the English must go. Michel Bahadur, captured as a child by the Hiroquois and raised among them, left a wife and son behind when he returned to the Mongols as an ambassador and intermediary. Now he must take Noyan to the woods and rouse the Hiroquois against the English.

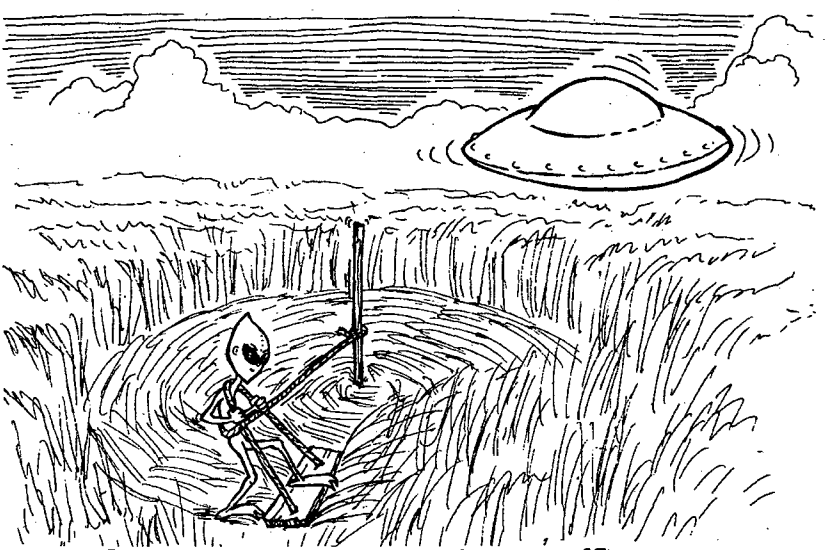
They win and the tale ends, but not before it casts a complex shadow: The Hiroquois, who permit all a voice in their councils, are learning to dream of empire, while Noyan dreams of a Mongol realm truer and stronger than the decadence of Europe, with himself (of course!) as its all-powerful khan. The two dreams are hardly compatible.

The rest of her stories are just as enticing. Enjoy!

Many years ago, a generation of SF fans and future writers were awed by the deft and witty works of Fredric Brown (1906-1972). He was a master of the short-short, and over a hundred were collected by NESFA Press in *From These Ashes*. He didn't write many novels, but *What Mad Universe* and *Martians, Go Home* remain titles to conjure memories and visions. You can now get these tales, along with *The Mind Thing*, *The Lights in the Sky Are Stars*, *Rogue in Space*, and two shorts that eventually became the last, in **Martians and Madness: The Complete SF Novels of Fredric Brown**.

They're old—*Universe* dates back to 1949—but they remain gems for the field of SF. If you've never seen them, give yourself a treat.

Five Star (an imprint of the Gale Group) is still at it, bringing out collections of short stories by authors so noted that I hardly need do more here than tell you the books exist. So, if you crave a fix of Esther Friesner, go get a copy of **Death and the Librarian and Other Stories**. For a few doses of Jack Chalker, get **Dancer in the Dark**. For ten hits of George Zebrowski, look for **In the Distance, and Ahead in Time**. And if *Manta's Gift* made you wish for more of Timothy Zahn, order up a **Star Song and Other Stories**. ■



Crop circle hoax revealed...

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

BRASS TACKS

Dear Dr. Schmidt,

Grey Rollins' "Tower of Babel" [November 2002] presents the most plausible "if-this-goes-on" story that I've seen in *Analog* (or elsewhere) since Heinlein passed on.

However, I don't know whether writing things down by hand would really have enabled Rollins' characters to communicate in spite of the Babel virus. In the USA, at least, over the past few decades much handwriting has deteriorated to the point of unintelligibility.

Many Americans seem to feel (as did Rollins' TransVox users) that, given modern communications technology, no reason exists to exert the effort to communicate clearly without that technology—let alone to expect children to learn how to do so. In other words, a lot of us in the U.S. write no more clearly than Martha Snead spoke—or the way that her parents and the rest of the country spoke, after TransVox came into their lives.

Given this, if (as in Rollins' story) a universal-translator crash forced citizens of a translator-dependent America to communicate by writing notes, then the fact that "everyone still knew the same alphabet and words were still spelled the same" might not actually help that much.

Quite a few folks (for instance) form the letter "n" like "u," the letter "a" like "u," the letter "a" like "o," the letter "o" like "c," the letter "c" like "e," the letter "e" like "i," the letter "t" like "i," and/or the letter "t" like "l." Others (or, often the same people) form the letter-pairs "in" and "ni" and "iu" and "ui" indistinguishably from each other and from "m." Pity them (and the recipients of their urgent hand-scribbled notes) if a crucial emergency memo contained words like "minimum" and "announce" and "limitation."

Such occurrences, in fact, notoriously infest the world of medicine; even in highly computerized healthcare facilities, hand-scribbled documents continue to exist. In fact, I earn a large part of my income working with hospitals to teach MDs and other staff-members how to write legibly at emergency-room speed. (Several of my current/recent corporate clients tell me that, a few years ago when they first became aware of the services I provide, they had initially decided against contacting me because at the time they had just purchased medical data-input/coding software which they expected to obviate the problems. They changed their mind, and sought my services, after some years of using the software.)

So if a civilization which depended on mumble-to-English translation-devices did, in fact, narrowly avoid collapse when the devices failed, I suspect that the first few hours after the Babel virus would demonstrate an urgent need for not only clear speech, but clear handwriting, in those beginning and remedial English classes.

Kate Gladstone
Albany, New York

The author replies. . . .

Kate,

I wrote myself a reminder note to respond to your e-mail, but later found that I couldn't read what I'd written . . .

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Ahem.

But seriously, your point is well taken. My own handwriting is decent, except for a tendency to slant the crossbar on capital H's, which tends to leave them looking rather like capital N's. I print, rather than use cursive (it's astounding how many people are unfamiliar with the word cursive) as I am left-handed and, like all left-handers, find myself at a disadvantage when my hand runs over the words I just wrote; pushing a pen just isn't as smooth an operation as pulling it the way right-handers do. Print allows me to advance my hand in discrete steps across the page. This produces a clearer result.

As to spelling . . . there are few things that shout ignorance more loudly than simple words spelled or used incorrectly. One of my personal gripes is the tendency to use 'you' when the writer actually should use 'your,' such as "I gave him you book." Say *what?* It's often difficult to know whether the problem is spelling or grammar. Either way, it reflects poorly on the writer.

Don't get me wrong—I'm certainly not perfect at spelling or grammar. I've never learned to type properly, either. They offered a course on typing in high school, but I didn't take it. I couldn't see a need for it. Little did I know that the irresistible urge to write stories would come upon me late one night in the mid-'80s. So nowadays I find myself hitting the wrong keys, which yields even more misspelled words. The cure—at least for me—is endless revision. I go over stories numerous times, trying to weed out as many problems as I can. Then the spell checker gets its chance to humiliate me. And it does.

Sigh . . .

Incidentally, I'd like to note that the initial idea for the story came from Stan. Thanks, Stan.

Grey Rollins

Stan,

[Re: "By The Lake", November 2002]

If there were anything to this story, I'd like to order a couple of genetically modified cheetahs, to deal with excessively loud motorcycles. Tweak the cats to respond to noises starting at around 90 db, and with their speed, the problem would be solved in a couple of weeks.

Dave Loomis
Portsmouth, NH

Stan,

"Survival Instinct" (October & November 2002) was awesome! A great story . . . award material!

Now I understand why we aren't receiving messages from ET civilizations. They all discovered evolutionary software. RIP.

The "predator" was by far the most interesting character! I admit I was rooting for it at some points.

Sequel—sequel—sequel! (Hmmm . . . he never did explain the funny twitches in the prosthesis at the end. . . .)

Miles Hopkins
Redwood City, CA

The author replies. . . .

Thanks for the kind words. As to the predator—I liked it, too. The story originated from a desire to create a new type of fictional monster. In my opinion, all the best monsters are sympathetic.

I have no sequel plans, although characters have been known to assert their own agendas. The at-the-end prosthesis twitches mentioned by Mr. Hopkins are continuing "no no" finger motions. Per October p. 17 (see: "oil change and a tune-up") and November p. 123 (ditto), the concurrent revving motors were a signal from Doug to Cheryl that the finger gesture wasn't random.

Edward M. Lerner

Dear Sir,

I am enjoying Edward M. Lerner's "Survival Instinct," but one incidental point grated. Decimation is indeed Roman in origin, but the Oxford English

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Dictionary defines "decimate" as "To select by lot and put to death one in every ten of (a body of soldiers guilty of mutiny or other crime); a practice in the ancient Roman army, sometimes followed in later times." There is a similar definition for "decimation."

And as a smaller point, "whence" means "from where", and the OED says that the "From" in "From whence" is superfluous. But it adds that "from whence" is common, and includes two Shakespeare quotations using "from whence" (although the "from" may be called for by the metre.).

Michael Harman
Holmwood,
37, Upper Park Road,
Camberley,
Surrey, GU15 2EG
U.K.

Read on: Most dictionaries now also recognize another meaning of "decimate" which has become widely used (probably more so than the original). Ironically, please see the editorial in the same issue.

Dear Stan,

Did you notice the connection between your November 2002 editorial and the last of Niven's Laws for Writers? (p.63, same issue) It will be more obvious if you are familiar with Walter J. Ong's "Orality and Literacy," an extremely important book which explores the similarities and differences between purely oral languages and those which have written equivalents.

Among Ong's key points are that the existence of a written language tends to stabilize the spoken language, enables accurate communication between people who can't meet face to face, and eases the process of working through drafts of what one wishes to communicate. (My paraphrase.) The first two relate closely to the points you made in your editorial, while the third has an obvious connection to Niven's 6th Law.

What the descriptivists fail to recognize is that written language isn't just a technology for recording spoken language. It has to follow much more strict rules than are necessary in speech because all of the context of speech (intonation, gestures, facial expressions, etc.) is absent, and compensation for that absence is required to avoid loss of what may be a significant part of the message.

Your point about finding the proper balance in language between evolution and rules is absolutely right. New words can be extremely valuable, if they carry new meanings and aren't just unnecessary substitutes for valid existing words. But new meanings for old words are confusing, whether or not the original meanings are forgotten. Far too many neologisms in today's spoken language exist not because someone needed to express a new meaning but because some clique wanted a way to exclude everyone else from their group. That is anti-communication.

One final point from Ong: The existence of a phoneme-based written language (e.g., any which use the Roman, Greek or Cyrillic alphabets) together with the technology of printing enables an educated and literate populace, as opposed to a literate elite ruling an ignorant populace. This not only provided the foundation for the enormous development of Western culture in the past four centuries, but also simultaneously enabled a clear and logical way of thinking about ourselves and our world which was essential to that development. If we as a society are to maintain the capability of rational thought and action, then it is essential that we remain a literate people, i.e., that we hold to the self-discipline of following the rules of our language when we communicate with each other, whether in speech or in writing.

Carl Scott Zimmerman

Dear Stan,

In the November 2002 issue, you

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

wrote an editorial regarding the English language. In there you argue that the prohibition against splitting infinitives is wrong.

You use, as an example, this sentence in which an infinitive is split: "They tried to absolutely forbid splitting infinitives."

You say that putting "absolutely" anywhere else would make the sentence sound awkward and stilted. How about this construction: "They tried, absolutely, to forbid splitting infinitives." I see nothing stilted or awkward about that construction.

While I'm on the subject of grammar, how about the issue of ending sentences with prepositions? A professor, whose name I can't remember, reportedly used this example of correct grammar being stilted. The sentence, "That's something I won't put up with" he changed to "That's something up with which I will not put."

If we accepted this construction as the final word, then it would be stilted and, in my opinion, nonsensical. How about this construction, which, by the way, uses fewer words. "I won't put up with that."

No stiltedness there, agreed?

Comments?

Michael Killian
Nashville, TN

Sorry, but I do find your suggested way to avoid splitting the infinitive both awkward and unclear. Does "absolutely" modify "to forbid" or "splitting"? And why go to so much trouble to avoid something that doesn't need to be avoided, anyway?

"I won't put up with that" is fine, but may not put the emphasis where the speaker wants it. There are plenty of cases where preposition-last is easiest, clearest, and best reflects actual common usage, as in "What are you waiting for?"

Dear Stanley Schmidt:

I took your November 2002 editorial to heart because of an incident delineating the changes in "official," or perhaps a better definition, "academic" English. I learned my basic English grammar in an old-fashioned school in Ketchikan, Alaska, prior to WW2. Old-fashioned because our textbooks were handed down to our school whenever a school in Washington State changed to newer versions. I became a career USAF officer, fighter pilot, and later commander. This mandated clear writing in order to communicate the same sense to groups of people that at times amounted to tens of thousands. After retirement, I was a technical writer and then operations training officer for a major airline. Part of our duties included writing training materials for air crews to study at home. Imagine my surprise when a colleague brought my latest endeavor to my desk, exclaiming "This is full of comma splices!" I looked up at him and asked "What's a comma splice?" Apparently that was a new solecism invented in America's English teaching caste quite some time after I graduated from college. I had never heard of "comma splices," and indeed once they were brought to my attention, I noted that seventeenth and eighteenth century writers were as guilty as I was of this contrived sin. By the way, I am a consummate reader, have a library of my own comprising about 3,000 books, and have been a faithful reader of *Analog* (*Astounding*) since 1945, when I discovered it at the age of 14, and I never changed a word of my monthly contribution, comma splices and all.

A further comment: as a college professor reading my students' writings, I noted that many of them put in a comma where a speaker would draw a breath. Also, many of our students had to take remedial English and mathematics because they never learned the material in high school. At least they did learn the material in college, although it cost them from a semester to three semesters to catch up to where they

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

should have been leaving high school.

Thank you—keep up the good work

Walt Bjorneby
Greeley, CO

Dear Stanley,

I've been reading *Analog* so long I can't remember when I started, and have found your editorials to be one of its most rewarding features.

There are only two editorial pages that I jump to immediately upon opening a magazine —yours and Lewis Lapham's. Lapham's for the fun of seeing pompous politicians artfully vivisected, and yours for the thoughtfulness and reason which characterize them.

Thank you so much. I just noticed you have published a volume, *Which Way to the Future?* Can't wait to get it.

Wayne Merry

Dr. Stanley Schmidt,

The media, including *Analog*, is suggesting the past/present possibility of life on Mars because of the "perhaps water" that has been discovered there. The debate between George J. Stawniczy and Robert Zubrin in the November *Analog* is also a good example of not thinking outside of the box. Unless we are able to recognize living things that do not resemble life forms that we have experienced on planet Earth, we will forever be doomed to very minor roles in understanding alien lifeforms.

While looking through a to-be-discarded pile of books while I was teaching chemistry at the college level years ago, I found a biology textbook that predates us all. However, among some quaint ideas, it included a set of guidelines for identifying living things.

Living things must:

1. Increase in total size. They must be capable of growth, not merely expansion/contraction.

2. Be irritable/respond to a stimulus. We may have difficulty identifying a stimulus and response if we depend upon earthbound experiences.

3. Reproduce/recreate their own kind. But we must be prepared to recognize that these organisms may be capable of producing life-forms that are unlike the original.

4. Have a metabolism: ingest, digest, absorb, circulate, assimilate, and utilize stuff that we may consider non-food and excrete some residue.

5. Be complex. That is a comparison to earthbound life-forms where some 150 enzymes and coenzymes are used to convert the carbohydrates we crave into energy. We must force ourselves to recognize non-traditional complexity.

Nowhere in this set of guidelines is there a mention or suggestion of carbon, oxygen, water or DNA, and yet they include, in my opinion, all the identifying characteristics of living organisms.

Our present and future search of the universe may not discover a gathering of life forms that have been looking for us, but our efforts to find them and be receptive to them finding us are more than necessary and welcome.

Stuart Lusty
Lynchburg, TN ■

The very idea that there is another idea is something gained.

—Richard Jefferies

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

CLASSIFIED MARKETPLACE

Analog April '03

Advertise in the world's leading science fiction magazines with our Analog/Asimov's combined classified section. Ad rates per issue: $2.95 per word (10 word minimum), $125 per column inch (2.25 inch maximum). SPECIAL INTRODUCTORY OFFER: Buy two ads and receive a third ad FREE. Send orders to: Dell Magazines, Classified Department, 475 Park Ave. S., 11th Floor, New York, NY 10016. Direct inquires to: (212) 686-7188; Fax (212) 686-7414 or email: classifiedads@dellmagazines.com

AUDIO/VIDEO

Audiobooks, Niven, LeGuin, Willis, Baxter, Egan, Sterling, Reed, Etc. www.audiotexttapes.com

BOOKS/PUBLICATIONS

CHRISTIAN SCIENCE FICTION print magazine and webzine. http://www.gateway-sf-magazine.com

CREATIVE SOLUTIONS INCLUDE REVOLUTION

Nova Albion: Science Fiction & Fact zine
Free catalog of all products Samples available
P A C, PO Box 2523, San Anselmo, CA 94979
www.pacificareacomm.com 415-259-0118

Dumb and Dumber* meets *Star Trek in a hilarious new comic book series. www.GuysExploringSpace.com

Novel: BEYOND THE TIME MACHINE; Mars Faces. http://us.geocities.com/bttm_book/

PUBLISH YOUR BOOK ONLINE, Third Millennium Publishing, a cooperative of online writers and resources, http://3mpub.com

www.rereadables.com. Online Used Book Store. Science Fiction, mystery and more.

INSTRUCTION

SCIENCE FICTION WRITING CLASSES. Published SF authors teach Science Fiction Writing online at www.WritingClasses.com. Selected "Best of the Web" by *Forbes*. For FREE catalog call 877 974-8377.

MISCELLANEOUS

PLASTIC MODELS: Space, Sci-Fi, TV, movies, etc. Free Catalog, also buying/trading. Green's Dept. DL, Box 55787, Riverside, CA 92517. (909) 684-5300; (800) 807-4759; FAX (909) 684-8819; dl@greenmodels.com; http://www.greenmodels.com

STARFLEET, the International Star Trek Fan Association. 4000 Members worldwide. www.REGION2.ORG. REGION2RC@AOL.COM

UNUSUAL ITEMS

Alien Nature or Human Nature: Understand it all. The Truth? Can you handle the Truth? Find out at www.all2true.org and www.all2true.com. Also, you may find interesting things like back issues of *Analog, Asimov's* and *Aboriginal Science Fiction.*

CLASSIFIED ADS under this heading or any of the other 18 subject areas we offer can be very rewarding.

THE SPECIAL SCIENCE FICTION COMBINATION FREE AD OFFER

PLACE A CLASSIFIED AD IN OUR NEXT TWO ISSUES AND RECEIVE A THIRD AD FREE!

Your ad will reach a combined audience of 100,000 readers in our outstanding publications—**Analog and Asimov's** science fiction magazines.

Call today for a new rate card.

ANALOG SCIENCE FICTION AND FACT
Classified Department 475 Park Ave South, 11th Floor New York, NY 10016
Call: (212) 686-7188 Fax: (212) 686-7414 classifiedads@dellmagazines.com

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

UPCOMING EVENTS Anthony Lewis

4–6 April 2003
ODYSSEY CON III (Wisconsin SF conference) at Radisson Inn, Madison WI. Guests of Honor: Harry Turtledove and Catherine Asaro. Cartoonist Guest of Honor: John Kovalic. Registration: $35 until 15 March 2003, $40 at door. Info: Odyssey Con, 901 Jenifer St., Madison WI 53703; oddcon@oddcon.org; www.oddcon.org.

17–20 April 2003
NORWESCON 26 (Washington state SF conference) SeaTac WA. Guest of Honor: Jane Yolen. Artist Guest of Honor: Jim Burns. Science Guest of Honor: Geoffrey Landis. Special Guest of Honor: Michael Whelan. Info: Norwescon, Box 68547, Seattle WA 98168-0547; info@norwescon.org; www.norwescon.org.

17–20 April 2003
WORLD HORROR CON 2003 (Horror-oriented conference) at Airport Hilton Hotel, Kansas City MO. Guest of Honor: Graham Masterton. Artist Guest of Honor: Nick Smith. Editor Guest of Honor: Don D'Auria. MC: Laurell K. Hamilton. Special Guest of Honor: Forrest J. Ackerman. Registration: $100 until 28 February 2003, $125 thereafter. Info: WHC 2003 c/o KaCSFFS, Box 2000, Lee's Summit MO 64063; Dee Willis, (913)248-9808; d_r_willis@yahoo.com, www.whc2003.org.

18–21 April 2003
MINICON 38 (Twin Cities SF conference) at Millennium Hotel [new hotel] Minneapolis MN. Guests of Honor: Robert J. Sawyer and Carolyn Clink. Fan Guest of Honor: Sue Mason. Musician Guest of Honor: Steve Macdonald. Registration: $45 to 17 March 2003, $70 at door. Info: Minicon 38, Box 8297, Lake St. Station, Minneapolis MN 55408; request@minicon.mnstf.org; www.mnstf.org/minicon38.

18–21 April 2003
SEACON '03 (EASTERCON) (54th British National SF convention) at Hanover International Hotel, Hinckley, Leisc., UK. Guests of Honor: Chris Baker, Christopher Evans, Mary Gentle. Info: Seacon 03, 8 The Orchard, Tonwell, Herts, SG12 OHR, UK; info@seacon03.org.uk; www.seacon03.org.uk.

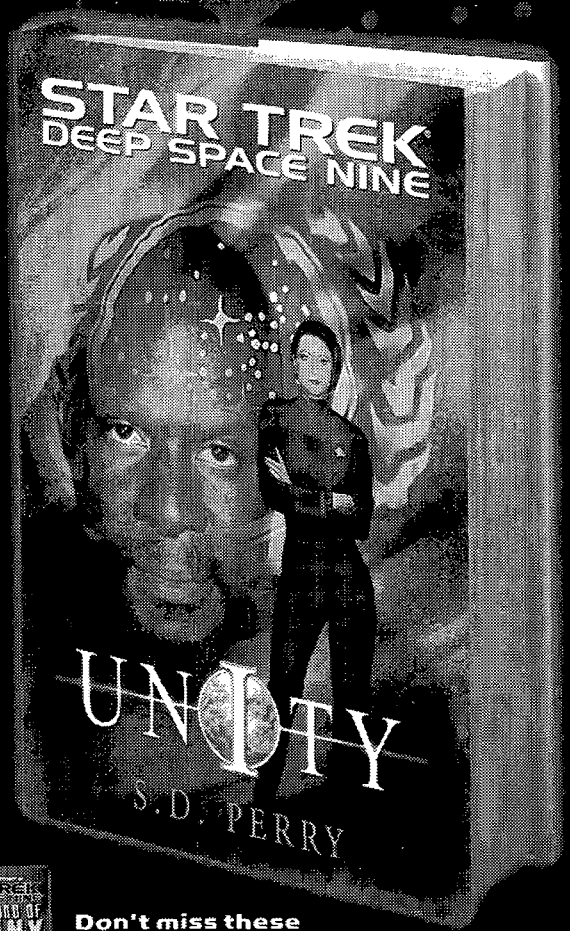
25–27 April 2003
JERSEYDEVILCON 3 (New Jersey SF conference) at Edison NJ. SF Guest of Honor: Harry Harrison. Horror Guest of Honor: Brian Lumley. Media Guest of Honor: Bob Skir. Fan Guest of Honor: The Donewitz. Local Pro Guests of Honor: Bard & Vicki Borah Bloom. Registration: $35 until 31 March 2003, $40 thereafter and at the door. Info: JerseyDevilCon, Box 403, Metuchen NJ 08840; JerseyDevilCon@aol.com, www.jerseydevilcon.com.

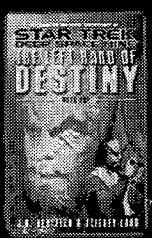
Attending a convention? When calling conventions for information, do not call collect and do not call too late in the evening. It is best to include a S.A.S.E. when requesting information; include an International Reply Coupon if the convention is in a different country. ■

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

A BOLD NEW CHAPTER IN THE STAR TREK® DEEP SPACE NINE® SAGA BEGINS!

Celebrate the spectacular 10th anniversary of the groundbreaking series *Star Trek: Deep Space Nine*® with the astonishing return of Captain Benjamin Sisko.





Don't *miss* these other spectacular *STAR TREK*® paperback novels!

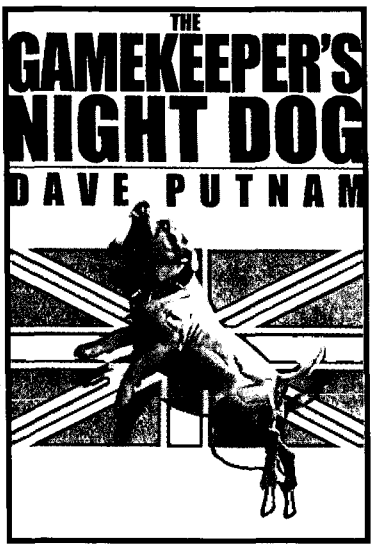
Also available as eBooks
www.startrek.com
www.simonsays.com/st

STAR TREK® BOOKS
Published by Pocket Books
A Division of Simon & Schuster
A VIACOM COMPANY

™, ® & © 2003 Paramount Pictures. All rights reserved. STAR TREK and related marks are trademarks of Paramount Pictures. Pocket Books Authorized User.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

What if The Sun Had Never Set on Britain's Empire?



The Gamekeeper's Night Dog is an alternate history novel that takes the reader to the last decade of the 19th century and into a Britain preparing to fight the Boer War. As this alternate universe moves away from ours, military technology diverges at a geometric pace. The alternate British Army rediscovers her ancient penchant for fighting with huge packs of savage war dogs garbed in battle harnesses. The machinegun is not treated as an experimental curiosity, but embraced as the lynchpin of the Queen's new fast attack doctrine. Armored war trains are packed with weapons to the point where they begin to resemble land going battle ships. Instead of a Vietnam type quagmire, Britain launches a desert storm into the killing fields of South Africa.

Man and his culture are created by technology. Change technology and you not only change history, you change man. The Gamekeeper's Night Dog is the first book in a trilogy that seeks to forge a new kind of science fiction: a genre that roots an alternate future into a rich tapestry of alternate history.

Available now at: www.workingamericanbulldog.com, www.Amazon.com, www.bn.com, (Barnes and Noble's website), or by special order through your local bookstore through Ingram.

The Book may be ordered directly from Bulldog Press. Please send a check or money order for: California Residents $26.60—US Residents other than California $25.00 Addresses outside of the US $35.00.

Mail to: Bulldog Press, PO Box 620358, Woodside, CA 94062

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED